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University of Alberta

Heidegger, Technology, and the Saving Power of Art

By



Daniel Tkachyk

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Master of Arts.

Department of Philosophy

Edmonton, Alberta
Fall, 1994



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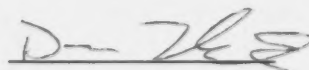
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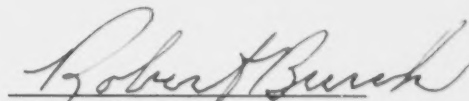
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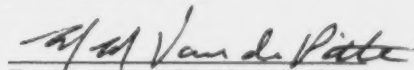
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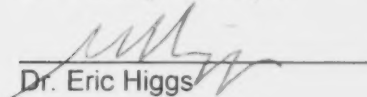
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Abstract

In this thesis, Heidegger's claim in the essay, "The Question Concerning Technology", that art may be able to save us from the hegemony of the essence of modern technology is discussed. Heidegger believes that the essence of modern technology is a way of revealing which closes off all other ways of thinking, and that art may provide a saving power which will help humanity avoid that hegemony. In order to evaluate this claim, in my first chapter I consider Heidegger's belief that the essence of technology is a way of revealing, and the etymological argument he uses to show this. In the second chapter, I discuss Heidegger's explanation of the character of the revealing prevalent in modern technology, which he calls *Gestell*, or 'Enframing'. This notion that the instruments of modern technology are made possible by a way of thinking where things are revealed as *Bestand* ('standing-reserve') is considered in the face of objections by Rorty and Ihde. Finally, in the third chapter, the danger of modern technology and the saving power of art is discussed. Heidegger thinks that the danger of modern technology is that, in Enframing, things are revealed to us as standing-reserve, and that Enframing blocks off other ways of revealing/truth. The hegemony of modern technological revealing harms humanity because it prevents us from knowing that everything is revealed to us within a context of understanding and that other contexts are possible, thus preventing people from realizing that the essence of human being is that we are the locus and medium of revealing/truth. Heidegger believes that art may provide a saving power in the face of this danger, but he does not explain how art may be able to do this. In order to explain how art can save us from Enframing, several options are considered, but all fail due to the same problem. Since Enframing is a self concealing way of revealing, it seems improbable that art will unconceal it. I conclude that art does not save us from modern technology by revealing Enframing, but by revealing other contexts of understanding, thus showing that other contexts are possible.

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Introduction

In this thesis I plan to discuss Martin Heidegger's essay "The Question Concerning Technology", and his notion that art may provide a saving power in the face of the danger posed to us in this age of modern technology. My interest in Heidegger comes from an interest in the philosophy of technology, but this thesis is not, strictly speaking, concerned with the philosophy of technology. Instead, I consider Heidegger in a more historical fashion. Heidegger was one of the first, and is one of the most influential, philosophers to consider questioning modern technology, yet his claim that art may provide a saving power has not been discussed at length. I am interested in seeing how art can save us from the essence of modern technology given what Heidegger says about the danger of that essence, rather than in considering how modern technologies could be considered a danger and whether art could save us from that danger. This is, first and foremost, a study of Heidegger's thought, not a discussion of how we are to cope with modern technology nor an explanation of how Heidegger's thought is situated in the history of philosophy.

Heidegger begins his essay "The Question Concerning Technology" by proposing to question technology. This questioning soon leads him to an examination of the essence of technology, beginning with a discussion of the everyday view of technology. Heidegger tells us that the current view of technology is that it is a 'means to ends' and a 'human activity', saying

[t]he manufacture and utilization of equipment, tools, and machines, the manufactured and used things themselves, and the needs and ends they serve, all belong to what technology is. (Heidegger, "The Question Concerning Technology", hereafter *QCT*, p.4).

The technology essay ends with Heidegger saying that what seems to be a different human activity, namely art, may be able to save us from the danger of

the essence of modern technology. He claims that art may provide a saving power from the dangers of the essence of technology due to its similarity with technology.

This claim certainly seems strange in this age where people measure the danger of technology as the thickness of the ozone layer or the mass of sulphur pumped into the atmosphere, and where people consider that further use of technology will save us from these calculable dangers¹. In the face of such prevailing attitudes, it is difficult to understand how art will save us from problems like UV radiation or acid rain.

Reading Heidegger's essay more carefully can help to avoid this confusion, for his explanation of the danger of modern technology reduces the importance of the ontic dangers and instead emphasizes the ontological danger of modern technology -- the danger as a way of revealing/truth, a way of thinking. Similarly, art does not save us by shielding us from the sun or rain, but instead Heidegger claims that art is a different way of revealing which may help us avoid the hegemony of modern technological thinking.

In order to understand what Heidegger means when he says art can save us from technology we should move through Heidegger's essay on technology, first considering Heidegger's explanation of the relationship between technology and truth. In the first chapter of this essay, the steps of Heidegger's argument explaining why technology should be considered a way of revealing are explored, beginning with a discussion of how we should question technology and ending with an explanation of how technology can be considered a way of revealing.

After this, the type of revealing prevalent in modern technology is discussed in the second chapter. Heidegger believes that modern technology is characterized by Enframing, a mode of disclosing truth where everything is understood as resources to be calculated, ordered and stored for later use.

Heidegger considers Enframing to be the essence of modern technology because Enframing makes modern technology possible. Heidegger's explanation of this mode of revealing is explored and criticisms of Heidegger's claim are considered in this chapter.

Finally, the third chapter considers Heidegger's claim that the way things are revealed to us in the age of modern technology poses a danger to humanity, and why Heidegger believes art may be able to foster a saving power in the face of this danger. Heidegger believes that the danger of modern technology is in Enframing, not in the physical dangers posed by technological apparatus. He also believes that art may be able to provide a saving power which will help us overcome the hegemony of the modern technological way of thinking. It is not clear from Heidegger's text how art will be able to do this, however.

While many philosophers have written about Heidegger's conception of the danger of the essence of modern technology, very little effort has been made to understand how art may provide a saving power in the face of modern technology. This thesis closes with a discussion of possible ways that art may save us from the essence of modern technology, taking Heidegger's essay "The Origin of the Work of Art" into consideration.

Notes

- ¹Such ideas are prevalent not only in today's society, but also throughout the history of the philosophy of technology. Carl Mitcham provides a brief history of the philosophy of technology in his essay "What is the Philosophy of Technology?", showing that its early history was dominated by engineer/philosophers who saw technology as a democratizing force and as a way of freeing us "from the limitations of nature" (Mitcham, p.75).

Chapter 1: Technology and Truth

In this chapter, Heidegger's questioning of modern technology is introduced. Heidegger proposes that we question technology, and soon after he begins examining the essence of technology. He begins by considering the common view of technology, and from there moves through a discussion of instrumentality and causation before he arrives at the conclusion that the essence of technology is a way of revealing/truth.

Heidegger says at the beginning of his essay that he wants to question technology. He says that in doing so we should not worry about isolated topics, but rather to "pay heed to the way" (QCT, p.3). This way, he says, is "a way of thinking" (QCT, p.3). Heidegger believes that an exploration of ways of thinking always leads through language -- that to study a way of thinking we must study the language of that way of thinking. This questioning concerning technology, this exploration of the way of thinking and the language it leads through, is done in order to "prepare a free relationship to it [technology]. The relationship will be free if it opens our human existence to the essence of technology" (QCT, p.3). Heidegger wants to open us up to a free relationship with the essence of technology. This will allow us to "experience the technological within its own bounds" (QCT, p.4). This statement is interesting because in this technological age we tend to believe that technology has no bounds, that there is no limit to the domain of modern technology. If we have a free relationship with the essence of technology we will be able to understand it and the danger it poses to us, and perhaps we will be able to evade that danger.

At this point, he begins to discuss what the essence of technology is. He does this after rejecting the notion that the essence of technology is something technological. He says that

[w]hen we are seeking the essence of 'tree', we have to become aware that That which pervades every tree, as tree, is not itself a tree that can be encountered among all the other trees. Likewise, the essence of technology is by no means anything technological. (QCT, p.4.)

In searching for the essence of technology, we should not be looking for a certain technological thing, not trying to find a particular piece of technology. Just as the essence of trees is not any particular tree, the essence of technology is not any particular piece of technological equipment. One could not say that the essence of trees is 'a maple', or that the essence of technology is 'a steam engine'.

Instead, we are initially looking for something common to all technology, and doing this will aid us in our search for the peculiar essence of modern technology. Heidegger offers a warning for us engaging in such a search. He says

...we shall never experience our relationship to the essence of technology so long as we merely conceive and push forward the technological, put up with it, or evade it. Everywhere we remain unfree and chained to the technology, whether we passionately affirm or deny it. But we are delivered over to it in the worst possible way when we regard it as something neutral; for this conception of it, to which we today we particularly like to do homage, makes us utterly blind to the essence of technology. (QCT, p.4.)

Heidegger claims that it does not matter whether we embrace or evade technology, we are chained to it nonetheless, and thus we are unable to experience its essence freely. The worst attitude to approach technology with, however, is not either affirmation or denial, but rather belief that technology is neutral, that it is not technology per se but only particular uses of it that are dangerous to us. This conception of technology, according to Heidegger, makes us blind, it prevents us from seeing the essence of technology. Later in

his essay, Heidegger explains that it is blindness to the essence of technology which leads to the danger of modern technology.

Heidegger's search for the essence of technology leads him to consider the current conception of technology. The anthropological instrumental definition of technology, that technology is a means and a human activity, is considered to be correct definition by Heidegger. He explains how this definition can be used to explain all instances of technology, for jet airplanes, power plants, sawmills, and stone tools are all understandable with the anthropological instrumental definition. The anthropological instrumental definition of technology is universal in its application, it can be used to describe every instance of technology, from the earliest uses of tools by humans to the power plants and air planes of modern technology. The instrumental definition of technology, and the instrumental rationality it is related to, are universal, unlike modern technology which is confined to a specific time in history.

This definition does not, however, necessarily uncover the true essence of technology. Heidegger believes that the anthropological instrumental definition of technology is correct, but not true.

The correct always fixes upon something pertinent in whatever is under consideration. However, in order to be correct, this fixing by no means needs to uncover the thing in its essence. Only at the point where such an uncovering happens does the true come to pass. For that reason the merely correct is not yet the true. Only the true brings us into a free relationship with that which concerns us from out of its essence. Accordingly, the correct instrumental definition of technology still does not show us technology's essence. (QCT, p.6.)

The correct definition of technology, the anthropological instrumental definition, does not necessarily bring us to the full truth of the essence of modern technology or of modern technology in particular. Just as correct definitions of trees (things which grow on Earth, objects

suitable for burning as cooking fuel) do not immediately uncover the essence of trees, the correct definition of technology does not immediately uncover the essence of modern technology in all decisive respects. The essence of modern technology, and the danger associated with that essence, are not found in the correct definition of technology¹, but instead are found after a search which begins with the correct definition. This does not mean that the correct definition is unimportant. Heidegger says "...we must seek the true by means of the correct" (QCT, p.6). Heidegger is saying that the correct definition does not uncover the true essence, but it provides a means with which we can seek the true essence. Heidegger says that we want to arrive at the true because it will bring us into a free relationship with that which concerns us. When we arrive at the true, we will uncover modern technology in its essence².

Heidegger suggests that we will be able to get to the true by studying the correct, that by looking closely at the instrumental view of technology, we may be able to arrive at the essence of modern technology. This does not mean, however, that Heidegger is trying to understand the correct definition more clearly or more accurately. Heidegger is proposing to study the correct definition so that he may be able to understand how it is possible that we accept the correct definition of technology.

Earlier in the essay, Heidegger says "[a]ccording to ancient doctrine, the essence of a thing is considered to be *what* the thing is" (Heidegger, QCT, p.4). But here he seems to be saying that essence is not only what a thing is. We know what technology is, that is what the correct definition tells us, but Heidegger is looking for something more. Essence, in this second sense, seems to mean the conditions for the possibility of technology. Heidegger proposes that by studying essence in the first sense, we will be able to understand essence in the second sense. In stepping beyond technology and

asking about the domain from which technology arises, we may be able to enter a free relationship with what concerns us and thus understand the conditions for the possibility of technology. This will then lead us to a third essence of technology, essence as enduring presence. Heidegger is saying that we should look closely at the anthropological instrumental definition of technology, asking what makes instrumentality possible, and that this will give us access to the other senses of essence of technology and the interplay between those senses of essence. These three senses of essence are not alternatives that we should choose between, but rather are all bound together in technology. Heidegger is not saying that we can disregard one or two of these senses of essence, but rather that when considering technology all must be taken into account if we are to get the complete story about technology.

To begin the search for the essence of technology by means of the instrumental definition, Heidegger poses two questions: "[w]hat is the instrumental itself?" and "[w]ithin what do such things as means and ends belong?" (Heidegger, *QCT*, p.6). These two questions correspond with the first two senses of essence, essence as what something is and what makes it possible. By learning what the instrumental is and where it resides, we can understand the essence of instrumentality. He then describes how a means and ends relationship is to be considered. First he says "[a] 'means' is that whereby something is effected and thus attained" (Heidegger, *QCT*, p.6). The means is used to achieve some kind of effect. He goes on to say that any place where there are effects, there must be causes. The means, in this situation, causes the effect, or causes the 'end'. But the end can also be considered a cause. In his second example, Heidegger considers a case where the 'end' being pursued 'causes' the type of means to be used in

pursuit of that end. The instrumental view of technology is tied to means and ends relationships. "Whenever ends are pursued and means are employed, wherever instrumentality reigns, there reigns causality" (Heidegger, *QCT*, p.6). As an instrumental activity, technology is bound up with causality. The means and ends relationships of technology are understood causally, and so to fully understand those means and ends relationships, the instrumental anthropological definition of technology, we must explore causality.

Heidegger then goes on to discuss the traditional explanation of causality, since his description of instrumentality seems to be bound up with causality, and since instrumentality must be explored to come to the essence of technology. The search which Heidegger undertakes is a questioning into the essence of causality, just as he inquired into the essence of technology at the beginning of the essay. Again, instead of looking for an abstract universal definition, or a list of commonalities found in different events which we describe as causal, Heidegger questions into the history and origin of our causal thinking.

In western thought there are four traditional causes. Heidegger does not introduce these causes in his native German, nor does he do it in the Greek used by Aristotle when he originally discussed the four causes. Instead Heidegger introduces them using the Latin terminology. Heidegger does this because the Latin terms are used today by the inheritors of the western philosophical tradition when Aristotle's work is discussed. Heidegger wants to show how the western philosophical tradition has come to understand causality, and how this understanding is related to the essence of modern technology.

The *causa materialis*, or material cause, is the matter out of which an object is made. To illustrate this, Heidegger uses the example of silver used to

make a chalice. The *causa formalis*, or formal cause, is the form or shape which the material enters. The *causa finalis*, or final cause, is the end for which something is made. In Heidegger's example, this is "the sacrificial rite in relation to which the chalice required is determined as to its form and matter" (Heidegger, *QCT*, p. 6). The *causa efficiens*, or efficient cause, is that which brings about the effect. To continue with Heidegger's example, this would be the person who makes the chalice, the silversmith.

Heidegger questions the universal acceptance of the doctrine of the causes. He says that "for centuries we have acted as though the doctrine of the four causes had fallen from heaven as a truth clear as daylight" (*QCT*, p.6). The fourfold nature of causality is accepted without reservation by modern thinkers, but perhaps we should consider our dogmatic acceptance of this explanation of causation. To do this Heidegger considers the meaning of the word 'cause' as it was originally used in the four causes, and explores the relationship between those causes.

In order to question causality, Heidegger looks at the history of our use of the word 'cause'. Heidegger believes that when we consider the etymology of terms, we find out how it was originally used and how it evolved; thus we can better understand the way of thinking which makes such uses of the word possible. Heidegger does not think that language is a tool which we use as we see fit. He believes that the words and language we use are tied to our way of understanding the world, that language is intimately connected with Being³.

Heidegger thinks the instrumental view of language as a tool is not 'true'. He believes that in the questions of who we are, language and truth belong together essentially. The essence of being and language are such that there is an inevitable 'fallenness' in favour of the ontic over the ontological and hence to understand who we truly are involves questioning how we have

hence to understand who we truly are involves questioning how we have come to speak about things, recovering the concealed ontological origin of our way of thinking. Because of this, the clues to understanding our situation in this epoch of modern technology can be found through a discussion of the language of modern technology. When discussing truth in *Being and Time*, Heidegger says

...we must avoid uninhibited word-mysticism. Nevertheless, the ultimate business of philosophy is to preserve the *force of the most elemental words* in which Dasein expresses itself, and to keep the common understanding from levelling them off to that unintelligibility which functions in turn as a source of pseudo-problems. (*Being and Time*, hereafter *BT*, p.220.)

Heidegger believes it is because we have lost the force of the most elemental words that we have fallen into the situation we currently face with modern technology. In order to understand who we truly are and the situation we are now in, Heidegger thinks we must consider the language we use and question the origin of that language.

Knowing the etymology of words such as 'cause' can help preserve the force of such words, and thus give us an insight into the way of thinking which allows us to use the term 'cause'. The way we use 'cause' today is connected to our history of using that term and to the way of thinking tied to the use of those terms: in order to understand the modern technological usage of 'cause', and thus the context of understanding making such usage possible, Heidegger believes we must first trace the origin of the term, and thus the history of our thinking in terms of causation.

When studying the history of the language we use, and thus studying the history of Being, Heidegger pays close attention to situations where Greek words are translated into Latin. He believes that great insight into our

understanding (or, perhaps, our lack of understanding) can be gained by looking at such moments. As Macomber says

The translation of philosophical concepts from one language into another is not the harmless and relatively conventional matter which it might seem. In Latin translation, according to Heidegger, the vitality of the original Greek notion is lost and the word becomes a *term*. What he calls "the power of the word to *name*" is irretrievably lost. (Macomber, p.153)

Translation is not neutral. The Greek words lose something when translated from Greek to Latin, they become mere terms. Heidegger sees the translation from Greek to Latin as one of the key events in the history of western thought. Heidegger says

...this translation from Greek into Latin is not accidental and harmless; it marks the first stage in the process by which we cut ourselves off and alienated ourselves from the original essence of Greek philosophy. (Heidegger, *Introduction to Metaphysics*, p. 13)

It is with this translation that we began to lose our connection with the original meaning of the Greek words as they become philosophical terms. Today we normally consider the Greek word and the Latin term as having the same meaning, but Heidegger denies this, claiming that the Greek words are rooted in a Greek experience, while the Latin term is not. Heidegger discusses this theme in "The Origin of the Work of Art".

Beneath the seemingly literal and thus faithful translation there is concealed, rather, a *translation* of Greek experience into a different way of thinking. *Roman thought takes over the Greek words without a corresponding, equally authentic experience of what they say, without the Greek word.* The rootlessness of Western thought begins with this translation. (Heidegger, "The Origin of the Work of Art", hereafter OWA, p.23)

The Greek words arose out of everyday usage, out of the day to day dealings of the ancient Greeks. Words such as αἴτιον, ἀλήθεια, and εἰδός were not philosophical terms with specific, technical meanings. They were the

words of normal conversation, words in the vocabulary of all Greeks. These words were transformed into terms, first through their valorization by Greek philosophers, and then even more dramatically when translated into Latin. The words lost their connection with the everyday experiences of people and became technical terms with meaning tied to a function within a conceptual framework. As such, these terms, and the philosophical systems which use them, lose their grounding in the experience of the language users. The translation from Greek to Latin drives a wedge between our experience of the world and the language which we use to describe it. Describing this

Macomber says:

Words arise out of experience as plants grow out of the soil from which they draw their nourishment. This is the difference between the *word* and the *term*, which is devised with specific reference to its function within a conceptual framework. The Romans take over Greek words without the Greek experience out of which they grew; they are not *their own*, and their roots are either lost or grafted onto an altogether different experience. (Macomber, p. 153)

The Latin terms have lost their connection to the experience of the thinker. Instead of arising out of the 'concerned dealings' of people in the familiar world, the translated terms either lose their roots or become connected to an altogether different background of experience. The Latin terms, and the philosophy which uses them, are not grounded in the experience of the people using such language. Instead they are grounded in an experience with which is alien to both the Romans and to ourselves, the inheritors of their translation⁴.

The effects of this translation from Greek into Latin can be seen when we look at 'causation'. Today the term 'cause' is usually used to mean bringing something about, to obtain results and effects. Heidegger says that because of this, we have given *causa efficiens* a primary role, minimizing the role of the

others to such an extent that we rarely even consider *causa finalis* to be part of causality (QCT, p. 7).

But when Aristotle conceived the four causes, he did not use the Latin term *causa*. The Greek word which was transcribed as *causa* in Latin and 'cause' in English was αἰτίον, a legal term meaning that to which something is indebted, or that which something is responsible for. Liddell and Scott say αἰτία is "a charge, accusation, imputation, blame,... and so the guilt or fault implied in such accusation", as well as being described as "a cause, like the Lat. *causa*, for the sake of" as a second meaning (Liddell and Scott, p.42). This word is rooted in the verb αἰτέω, which means "to ask or beg" (Liddell and Scott, p.42). The Latin word, on the other hand, has an entirely different root. Heidegger explains that *causa* is related to the Latin *cadere*, a verb which means 'to fall'. When we consider the term *causa* with this in mind, we see that it means "that which brings it about that something falls out as a result in such and such a way" (QCT, p.7). Instead of the Greek notion of responsibility, the Latin carries an implication of an effect falling out of a causal chain, of something like the last domino in a series dropping to the ground. The Latin term has the connotation of something which can be explained completely using only mechanical terms such as gravity, force and acceleration. This is similar to our current conception of causation. The Greek word, however, does not carry the same implication of a cause-effect relation as we commonly understand cause to mean today. Unlike the Latin term, the Greek word was used to ascribe responsibility or blame for an action or an outcome. Heidegger is saying that the mechanistic implications of the term *causa* are quite different from the connotations of responsibility brought about by using the word αἰτίον.

I think Heidegger is right when he explains the difference in the connotations we usually associate with *causa* and those of the Greek word αἰτιον. When we think of causes today, we tend to do so with regard to a much more mechanistic viewpoint than the one conjured up by the Greek word. The explanation Heidegger gives for this change, however, may be problematic. Heidegger is claiming that the translation from Greek to Latin robbed the word of its authentic meaning, turning it into a mere term with a different set of connotations. The Greek αἰτιον was turned into the Latin *causa*, and the implications of legal responsibility were lost. The Latin *causa* did carry a legal connotation, however -- in Cicero, it was used to mean a lawsuit (*causa capitis*, see *Cassell's Latin Dictionary*, p.88). The Latin also carried connotations of responsibility, being used to say 'on account of' or 'for the sake of'. Some of this can be seen today when we speak of 'just causes' in the English language. With these examples it can be seen that the Latin translation did have connotations of legality and responsibility, although perhaps not the same as the Greek, in the period following Aristotle. It is not clear, however, whether these connotations of *causa* were also the result of the Greek influence on Rome, or whether it was part of the authentic Latin meaning of the word *causa*.

Regardless of the source of this meaning of *causa*, the fact that *causa* carried some legal connotations over two hundred years after Aristotle casts some doubt on whether or not it was the translation from Greek to Latin which led to mechanical view of causation. It is possible that the Latin *causa* carried legal implications similar to the Greek word αἰτιον, and the mechanistic connotations which we see so strongly today were a later addition. This does not, however, seem to contradict Heidegger's claim that the understanding of causation shifted to a far more mechanical one between the Greek and

medieval periods. While Heidegger seems to be correct in saying that the connotations of responsibility were replaced with connotations of mechanistic chains of action, it is not completely clear from Heidegger's example that this change happened with the translation from Greek to Latin. It is possible that this change happened at a later date due to reasons other than the translation.

To illustrate his point about the results of the change in meaning, Heidegger again gives the example of a silver chalice, and explains how the four causes are ways of being responsible for something else when considered using the Greek words of Aristotle rather than the Latin terms they were translated to. Heidegger goes back to Aristotle's *Metaphysics* and *Physics* to find the words the Greeks used to understand causation. The first example given is what was called in Latin the *causa materialis*. The silver, or the matter out of which the chalice is made, is responsible for something else. The Greek term, ὕλη, meaning raw material or stuff of which a thing is made, and derived from the word for wood, is given here by Heidegger. The ὕλη of the chalice is silver, and so silver can be considered responsible for the chalice.

This alone, however, cannot be considered responsible, for all silver things are not chalices. Therefore εἶδος, or the form or aspect of chaliceness, is also responsible for the chalice. "Both the silver into which the aspect is admitted as chalice and aspect in which the silver appears are in their respective ways co-responsible for the sacrificial vessel" (QCT, p.7). The εἶδος and the ὕλη are considered to be co-responsible for the chalice, and being co-responsible they are bound together in the chalice, which is a sacrificial vessel. Neither the εἶδος nor the ὕλη take precedence over the other. They share responsibility for the chalice.

The third way in which responsibility for the chalice can be seen sits above the matter and the aspect. The ὕλη and εἰδός of the chalice can be seen as co-responsible, but the τέλος is what confines the chalice within the bounds of what it is to be. Heidegger considers the τέλος to be "above all responsible for the sacrificial vessel" (QCT, p.8).

Philosophers usually define 'τέλος' as Richard Sorabji does: "The Greek word *telos*, from which our word 'teleological' comes from, meant an end or goal" (Sorabji, p.156). Heidegger disagrees with this view, claiming that it is wrong to translate τέλος as 'aim' or 'purpose', saying instead that τέλος can be better understood as confining the thing within bounds, as giving a context to the thing. This is where Heidegger begins to diverge from the traditional western understanding of causation, and, some may say, from what Aristotle may have intended when he discussed αἴτιον. Heidegger claims that the τέλος sets the boundaries within which the thing is to be brought into appearance.

It is that which in advance confines the chalice within the realm of consecration and bestowal. Through this the chalice is circumscribed as sacrificial vessel. Circumscribing gives bounds to the thing. (QCT, p.8.)

The τέλος is the context within which things can come into being. In the case of the chalice, it is the context of religious worship and belief which makes it possible for a chalice to exist. The chalice is not a mere cup -- it is not just a container suitable for drinking, sitting in a kitchen cupboard waiting for a suburban family to drink iced tea from. The chalice may be a vessel containing the blood and body of Christ, it plays a central role in a religious ceremony. This context of religiosity determines what sort of matter and form, ὕλη and εἰδός, will be used for the cup. A different context, such as a suburban patio, or a campus pub, would demand a different ὕλη, perhaps

plastic or glass, as well as a different εἶδος, perhaps that of a brightly coloured cylinder or a standard pint mug. These different contexts demand different types of cups, each context calls for a different ὕλη and εἶδος. A religious context calls for a chalice, while a context of leisure time for mass-consumers, or a context of mass consumption of alcohol as a leisure activity, call for different kinds of designs and must be made out of different kinds of stuff.

Heidegger is careful to point out that although the τέλος is a boundary it does not restrict the chalice. "With the bounds the thing does not stop; rather from out of them it begins to be what, after production, it will be" (QCT, p.8). The bounds do not hold back the chalice, rather, they give the chalice a place to become what it will be. Just as a road could be considered a boundary from which a car cannot safely stray, the road also gives the car freedom to move unencumbered, and thus allows the car to be a car. The boundary for the car is not restrictive, it is what makes travel with a car possible. Similarly, the τέλος does not restrict the chalice, it is the condition of the possibility of it being produced⁵. It is the τέλος, then, that is responsible for what aspect and matter are together co-responsible for. The τέλος holds the form and matter together in being responsible for the chalice. The τέλος allows one to determine what matter and form should be used. In Heidegger's example, the τέλος specifies that what is to be made is a sacrificial vessel, and this determines the form, that of a chalice, and the matter, silver.

It is unclear from Aristotle's texts whether Heidegger is justified in his claims about τέλος. Aristotle's examples do not decisively end this debate, and could be used to support both the claim that τέλος is an aim or purpose,

or that it is a context which makes things possible. For example, in the *Metaphysics*, Aristotle says:

καὶ ὅσα δὲ κινήσαντος ἄλλου μεταξύ γίνεται τοῦ τέλους, οἷον τῆς ὑγείας ἢ ἰσχυασίας ἢ ἢ κάθαρσις ἢ τὰ φάρμακα ἢ τὰ ὄργανα· πάντα γὰρ ταῦτα τοῦ τέλους ἐνεκά ἐστι, διαφέρει δὲ ἀλλήλων ὥς ὄντα τὰ μὲν ὄργανα, τὰ δ' ἔργα. (Aristotle, *Metaphysics* V. ii., 1013b 1-4.).

In this passage Aristotle describes τέλος as a type of cause and gives an example where he shows that there are a number of actions which can be classified under the τέλος of health care. The traditional understanding of this can be seen through the translation given by Tredennick:

All those means towards the end which arise at the instigation of something else; as, e.g. fat reducing, purging, drugs and instruments are causes of health; for they all have the *end* as their object, although they differ from each other as being some instruments, others actions. (Aristotle, *Metaphysics* V. ii., 1013b 1-4.).

Tredennick sees Aristotle as considering the τέλος to be an aim or purpose. At the beginning of the passage he describes actions that are 'means towards the end'. This implies that a τέλος, or end, is a specific goal or purpose towards which we progress. This is followed by a list of instruments and actions which are the 'causes of health' -- that the instruments and actions lead to a specific aim or purpose. Next he says that all of the previous examples 'have the *end* as their object', again implying that the τέλος is a specific goal which we move towards.

A distinction can be seen when the Tredennick translation is compared with a translation of the same passage more concerned with literal understanding than with proper English style and grammar.

And how many soever of the rest having moved in the midst become from the telos, such as leanness, or purification, or drugs, or instruments of health; for all of this is for the sake of the telos, and they differ from one another just that being on the one hand instruments, and on the other hand actions. (Aristotle, *Metaphysics*, V.ii., 1013b 1-4.)

The differences between the two translations are apparent from the beginning of the passage. In the original Greek, nothing like Tredennick's phrase 'means towards the end' occurs. I assume Tredennick is translating 'τέλος' as 'end', but since 'τέλος' occurs in the genitive case (τέλους), it could not fit easily into the type of construction he gives. Since 'τέλος' occurs in the genitive, it cannot be the goal, it cannot be moved towards. Instead, it must be the source or the origin. This use of the genitive case also causes problems with Tredennick's rendering of Aristotle's list of healthy things. Tredennick translates "τῆς ὑγιείας ἢ ἰσχυασία ἢ ἡ κάθαρσις ἢ τὰ φάρμακα ἢ τὰ ὄργανα" as "fat-reducing, purging, drugs, and instruments are causes of health." The first problem that can be seen with this is that there is no word in the Greek to correspond with Tredennick's use of 'causes' -- the word 'αἰτίον' is not present in Aristotle's text. The next problem, and the main one with Tredennick's work, is that the word he translates as 'health', τῆς ὑγιείας, is in the genitive case. As such, it cannot be portrayed as the end point or the goal, rather it is the source of the actions and instruments in the list. Aristotle is saying that leanness, purification, drugs, and instruments are *of* or *from* health. He does not say that they are stepping stones on the way to health, or that they cause health, instead he is saying that they 'become from the telos', that they have their origin in health. Similar problems can be found in the next phrase as well. Here Tredennick says "for they all have the *end* as their object." Once again, Tredennick has injected a term, this time 'object', into his translation which has no corresponding Greek word in Aristotle's text but

which drastically alters the meaning. Aristotle does not use any word which, like 'object', could imply that the *τέλος* is an aim or purpose. Instead, Aristotle says "πάντα γὰρ ταῦτα τοῦ τέλους ἕνεκά ἐστι", or "for all this is for the sake of [or because of] the telos." Once again, Aristotle seems to be using *τέλος* to be the source, rather than the goal, of the actions. The Greek text supports the idea that the word *τέλος* should not be understood as meaning 'aim' or 'purpose'. It is not used by Aristotle as a goal, but rather as a source of acts or instruments.

This does not necessarily mean that Heidegger is right when he says that the *τέλος* 'gives bounds', for the Greek text does not use a word which directly corresponds with 'bounds' either. There is an etymological connection linking *τέλος* with the notion of bounds, however. Heidegger's side of the argument is bolstered by the fact that Curtius says *τέλος* is related to the Greek *τέρμων*, or boundary. This evidence is not conclusive since Curtius also says that *τέλος* is related to *τέρμα*, or goal (Curtius, pp.263-264). The etymological evidence is inconclusive in deciding between the two readings of *τέλος*.

Heidegger's explanation does seem to fit better with Aristotle's text, however. Heidegger does see the *τέλος* as a source, for he says "[w]ith the bounds the thing does not stop; rather from out of them it begins to be what, after production, it will be" (QCT, p.8). He does not see the *τέλος* as an end, as a finishing point. He considers it to be a beginning. As such, Heidegger's rendering seems to be more faithful to the original text than readings like Sorabji's -- the word '*τέλος*' is used to denote a source rather than an end in Aristotle's writing⁶.

Interestingly, Heidegger's discussion of *τέλος* might seem to be at odds with his discussion of instrumentality found in *Being and Time*. In the

sections of *Being and Time* devoted to equipmentality (15-18), Heidegger says that all of our dealings with things are based upon in-order-to relations. In other words, we understand a pencil in terms of its in-order-to relationship -- a pencil is an in-order-to write. We assign things such relationships, which sound very much like the relationship stating the 'aim' or 'purpose' of the object. Our understanding of the world is based upon these relationships which seem to be very much like the notions of final cause given by philosophers. Heidegger says that we understand the objects around us in terms of specific relationships and specific uses for those objects.

On the other hand, in his essay "The Question Concerning Technology" Heidegger seems to be denying the in-order-to relation and replacing it with something more straightforwardly contextual. The specific relationships of *Being and Time* are replaced with more general contexts of understanding. The in-order-to-write relationship between the writer and the pen has been replaced by a τέλος such as the context of 'disposable writing implements for a mass-consumer society'. The notion of final cause Heidegger finds so wrong-headed in his essay on technology seems to be very similar to his own notion of in-order-to relationships which he described in *Being and Time*.

Heidegger has not reversed his position, however. This is evident when one considers the passage in *Being and Time* where Heidegger mentions that there is no such thing as an individual piece of equipment. He says

[t]aken strictly, there 'is' no such thing as *an* equipment. To the Being of any equipment there always belongs a totality of equipment, in which it can be this equipment that it is. Equipment is essentially 'something in-order-to...'["etwas um-zu..."]. A totality of equipment is constituted by

various ways of the 'in-order-to', such as serviceability, conduciveness, usability, manipulability. (*Being and Time*, hereafter *BT*, p.68)

In this passage Heidegger is saying that while we assign pieces of equipment specific in-order-to relations, this does not mean that there is no overriding context of meaning. In fact, it means precisely the opposite, that we need a context of meaning, a *τέλος*, which makes the individual pieces of equipment possible. All equipment is made possible by the totality of equipmental relations. Any notion of aim or purpose, any in-order-to relation, presupposes a *τέλος*, a world of meaning. There is a context of meaning which is needed for any individual piece of equipment to exist. Without such a context, we could not have equipment. Just as the context of religiosity makes the chalice possible, the totality of equipment makes a pencil possible.

The fourth participant in the responsibility for the chalice is the silversmith. This is the cause which we most often mean today when we use the term 'cause', and is called in Latin the *causa efficiens*. Heidegger disputes this common understanding of causation, and claims that the silversmith is not an efficient cause. He says "[t]he Aristotelian doctrine neither knows the cause that is named by this term nor uses a Greek word that would correspond to it" (*QCT*, p.8). Heidegger claims that the cause which today we give the most importance to is, in fact, not found in Aristotle.

The phrase given by Aristotle, which has traditionally been interpreted as *causa efficiens*, is "ἡ ἀρχὴ τῆς μεταβολῆς ἢ στάσεως", or "the origin of the change or stationariness" (Aristotle, *Physica*, II.iii, 195a 22-23). It is in this discussion of efficient cause that the difference between αἷτιον and *causa* can be seen most clearly. When the term *causa efficiens* is used, the connotation is of the beginning of a mechanical process, such as the first domino in a series which falls, or perhaps of the first push to the domino. In

Aristotle's text this connotation is not so clear, however. Instead, we can see something more like responsibility being implied. Aristotle's examples can help to make this implication of responsibility clear. When discussing this type of cause, he says: "τὸ δὲ σπέρμα καὶ ὁ ἰατρὸς καὶ ὁ βουλευσας καὶ ὅλως τὸ ποιοῦν, πάντα ὅθεν ἡ ἀρχὴ τῆς μεταβολῆς ἢ στάσεως" (Aristotle, *Physica*, II.3 195a 21-23). Roughly translated, this means "And the sperm and the doctor and the deliberator and on the whole the maker, from all of whom [is] the origin of change or stationariness." None of these examples -- seeds, doctors, deliberators, or makers -- fit easily into a mechanistic understanding of αἰτίον. Aristotle's examples do not seem to imply a mechanistic cause, like that of billiard balls striking each other, or of dominos tumbling. Instead, Aristotle is saying that the origin of change is in something more like 'planning'. His human examples, the doctor and the deliberator, are clearly not mechanistic, but instead imply thought and planning. Both the doctor and the deliberator carefully consider the situations before them and then act accordingly. Their actions cannot be fully explained with the mechanistic understanding of *causa efficiens*. His non-human example is also not a mechanistic one. He gives sperm as an example, and he believed sperm to be something which carried the form (εἶδος) of what was to grow to the female, who provided the material (ὕλη) required for the growth of the new being. When he discusses sperm in the *Generation of Animals*, Aristotle compares its action to that of a carpenter. He says

...no material part comes from the carpenter to the material, i.e. the wood in which he works, nor does any part of the carpenter's art exist within what he makes, but the shape and the form are imparted from him to the material by means of the motion he sets up. It is his hands that move the tools, his tools that move the material; it is his knowledge of his art, and his soul, in which is the form, that move his hands or any other part of him with a motion of some definite kind.... In like manner

...nature uses the semen as a tool and as possessing motion in actuality, just as tools are used in the products of any art, for in them lies in a certain sense the motion of the art. (Aristotle, *Generation of Animals*, I.22 730b11-23.)

Like a carpenter, the sperm is the source of motion for what is made. Aristotle compares the semen to the knowledge and skill of a craftsman, rather than considering it to be a merely mechanistic process. The sperm, like the carpenter, is involved in gathering together what is necessary for making something in light of a plan for what is to be made, and then setting that production in motion. It is not merely an initial mechanistic step in a series. What has been interpreted as *causa efficiens*, and understood mechanistically in the years since Aristotle appears to be something quite different when Aristotle's text is examined closely. Aristotle does not use examples such as a push of a stone causing it to roll, instead he uses examples which involve gathering together, such as the sperm, or planning and thinking, such as the doctor and the deliberator.

Heidegger expands on this, saying that the silversmith is not an efficient cause, the silversmith is not a mere mechanistic producer of an artifact. Instead, he says that the silversmith is someone who deliberates, who carefully considers what is to be made and how it should be made. The silversmith deliberates on what is to be made and gathers together the other causes of the chalice.

The three previously mentioned ways of being responsible owe thanks to the pondering of the silversmith for the 'that' and 'how' of their coming into appearance and into play for the production of the sacrificial vessel. (QCT, p.8.)

The silversmith considers carefully the three other ways of responsibility, and then brings the chalice forward into appearance. The silversmith considers the τέλος, and then in light of this gathers, or chooses, the appropriate ὕλη and

εἰδός for the chalice. The silversmith thinks and deliberates, carefully considering the τέλος and gathering the εἰδός and ὕλη appropriate for that τέλος. It is the careful consideration, the λόγος and the λέγειν, of the silversmith which brings the chalice forward into appearance⁷. Heidegger is saying that the silversmith's role is more mental than mechanistic, a conclusion which is consistent with Aristotle's text. The silversmith's task is not the shaping of silver into a chalice which will be used as a sacrificial vessel, the silversmith chooses silver and the form of a chalice, bringing the chalice forward into appearance.

The four ways of being responsible are united in that together they are responsible for bringing something into appearance. Heidegger warns against misinterpreting this usage of responsibility.

Today we are too easily inclined either to understand being responsible and being indebted moralistically as a lapse, or else to construe them in terms of effecting. In either case we bar ourselves the way to the primal meaning of that which is later called causality. So long as this way is not opened up to us we shall also fail to see what instrumentality, which is based on causality, actually is. (QCT, p.9)

We normally think of being responsible in one of two ways: as being at fault, that being responsible is a moral failing, or as a cause in the traditional manner, as something effecting a change in a physical sense. Heidegger says that these two ways do not explain being responsible, or causation, as the Greeks understood it with the word αἴτιον. Heidegger explains that "[t]he four ways of being responsible bring something into appearance. They let it come forward into presencing" (QCT, p.9). The ways of being responsible set the chalice on the way to its arrival, to its lying ready before us as a sacrificial vessel. This is what Heidegger considers to be the most important thing about being responsible. He says "[t]he principal characteristic of being responsible

is this starting something on its way into arrival" (QCT, p.9). The four ways of being responsible start things on their way to arrival, they are beginnings in the coming to be of things. Heidegger suggests that we should use the verb occasioning [*Ver-an-lassen*] to describe how being responsible induces something to go forward to its arrival. Occasioning, then, is the essence of the Greek concept of causality in the first sense of essence, in the sense of what a thing is.

Heidegger then goes on to try to explain the essence of technology in the second sense, answering the question "[w]ithin what do such things as means and ends belong?" (QCT, p.6). After telling us that occasioning is the essence of technology, Heidegger asks "[b]ut in what, then, does the playing in unison of the four ways of occasioning play?" and then immediately gives his answer: "They let what is not yet present arrive into presencing. Accordingly, they are unifiedly ruled over by a bringing that brings what presences into appearance" (QCT, p.10). The four ways of occasioning are united under a certain kind of bringing which brings what presences into appearance. This type of bringing is elaborated on with the use of a quote from 205b of Plato's *Symposium*, which Heidegger translates as follows:

Every occasion for whatever passes over and goes forward into presencing from that which is not presencing is *poiesis*, is bringing-forth [*Her-vor-bringen*]. (QCT, p.10.)

Heidegger is saying that occasioning, or αἰτιον, belongs to ποιήσις, which he translates as *Her-vor-bringen*⁸, or bringing forth. When this passage of the *Symposium* is translated, ποιήσις is usually understood as to refer to poetry, as in the Loeb translation which reads "[f]or of anything whatever that passes from not being into being the whole cause is composing or poetry." This passage continues on to say "so that the productions of all arts are kinds of

poetry, and their craftsmen are poets" (Plato, *Symposium*, 205b). Plato is talking about the work of the craftsman and comparing it to the creative work of the poet, saying that both the poet and the craftsman engage in ποιήσις, they both make things. Heidegger does not deny this, but expands on it, saying that nature too engages in ποιήσις.

Not only handcraft manufacture, not only artistic and poetical bringing into appearance and concrete imagery, is a bringing forth, *poiesis*. *Physis* also, the arising of something from out of itself, is a bringing forth, *poiesis*. (QCT, p.10)

Physis (φύσις), or nature, like the work of a poet, is a bringing forth.

Heidegger also makes a distinction similar to one Aristotle makes in the *Physics*, pointing out that φύσις is a coming to be in itself, while the actions of the craftsman (τέχνη) are coming to be from others.

For what presences by means of *physis* has the bursting open belonging to bringing-forth, e.g., the bursting of a blossom into bloom, in itself (*en heautoi*). In contrast, what is brought forth by the artisan or the artist, e.g., the silver chalice, has the bursting open belonging to bringing-forth not in itself, but in another (*en alloi*), in the craftsman or artist. (QCT, pp.10-11.)

Heidegger agrees with Aristotle in that the origin of change differs between acts of nature and acts of the craftsman, but in saying this, Heidegger has also shown that the work of nature and the work of the artisan is not that different -- both are involved in the bringing-forth into appearance of things⁹. The four modes of occasioning are all at play within the realm of bringing-forth, regardless of whether the bringing forth is happening in a blooming flower in a meadow or in the workshop of the craftsman.

Heidegger now questions this 'bringing-forth', asking how it happens, and what is this bringing-forth. To these questions he answers

...[b]ringing-forth brings hither out of concealment forth into unconcealment. Bringing-forth comes to pass only insofar as

something concealed comes into unconcealment. This coming rests and moves freely within what we call revealing [das Entbergen]. (QCT, p.11.)

The bringing-forth of nature and of the artisan brings things into appearance, into unconcealment. In this way it reveals the things to us. "The Greeks have the word *aletheia* for revealing" (QCT, pp.11-12)¹⁰, a word which we translate with the term 'truth'. With this move, Heidegger has taken us from a discussion of technology and instrumentality to a discussion of truth, a step which seems quite strange and yet at the same time quite obvious. As Biemel says,

[w]hat at first appeared to be strange, even irreconcilable - bringing technology into relation with *aletheia* - now shows itself, on the contrary, as inseparably linked. If we think of *aletheia* as disclosure, which makes something unhidden in the sense of letting something appear and of attaining presence, then we can see that what is produced in every bringing-forth is indeed a presence, whether it is a question of manufacturing a new appliance, building a wall, furnishing a dwelling-place, cultivating a new species of plant, or putting up a work of art. This is the most comprehensive definition, not in the sense of mere generality but in the sense that the nature of what is happening here is expressly kept in sight. (Biemel, p.135)

Biemel believes that although Heidegger's step may initially seem strange, it is very straightforward and obvious when one considers the definitions of terms already given by Heidegger. Since technology is connected with instrumentality, and instrumentality to causation, and causation to occasioning, and occasioning belongs to the realm of ποιήσις, or bringing-forth, and since "[b]ringing-forth brings hither out of concealment forth into unconcealment" (QCT, p.11), it seems clear that technology is within the realm of revealing, of disclosure, of ἀλήθεια.

While this chain of reasoning now seems evident, Biemel may have been a little too willing to accept Heidegger's argument. While for the most part I find it easy to accept Heidegger's reasoning, I find his steps from

ποιήσις to ἀλήθεια worrisome, in particular his use of the translation of ποιήσις as *Her-vor-bringen*, or bringing-forth.

As I mentioned earlier, this translation itself is not in itself problematic. *Hervorbringen* is not an unorthodox rendering of the Greek word ποιήσις, but the role it plays in Heidegger's argument may be suspect. In understanding *hervorbringen* (and therefore ποιήσις) as 'bringing-forth' rather than as 'producing', Heidegger may be guilty of the same sort of translation error which he accuses the Romans of making. He is ascribing connotations of the German term *hervorbringen* to the Greek word ποιήσις. *Hervorbringen* is a compound, made up of the German prefixes *her*, meaning 'here' or 'hither' and *vor*, meaning 'forward' or 'forth', attached to the root *bringen*, 'to bring'. He also hyphenates the term, *her-vor-bringen*, in order to emphasize the presence of the prefixes and thus promote a reading of 'bringing-forth' rather than 'producing' (QCT, translator's fn.9, p.10).

The Greek word ποιήσις, however, does not carry these connotations. It is not a compound word, it is not composed of parts which literally mean 'bringing-forward', and it is not associated with any usages which must be read as 'bringing-forward'. ποιήσις is rooted in the verb ποίεω, which Wharton claims is related to the Sanskrit *putras*, or son (Wharton, p.105). ποιήσις also meant 'those adopted' (Liddell and Scott, p.1236) in Greece. Considering this evidence, the connotations carried by ποιήσις seem to be of producing children, rather than bringing-forward. As such, it seems doubtful that it did carry such a connotation of bringing-forth in the Greek world and so any usage of the Greek word with such a connotation would be illegitimate. This would block the step from ποιήσις to ἀλήθεια, for while bringing-forth seems to lead us to revealing, without the inauthentic reading of ποιήσις, we cannot get to bringing-forth. To paraphrase what

Heidegger said in "The Origin of the Work of Art", with this translation 'German thought takes over the Greek words without a corresponding, equally authentic experience of what they say, without the Greek word'.

This problem does not prove fatal to the Heideggerian project, however. Heidegger provides a second way of getting from technology to revealing. He points out that the name 'technology' is derived from the Greek τέχνη, and he describes two important things about this word. First, he explains that "*techne* is the name not only for the activities and skills of the craftsman, but also for the arts of the mind and the fine arts" (QCT, p.13). He is saying that τέχνη is not only activities like housebuilding or silversmithing, but also is the activities of the fine arts such as painting, and of the arts of the mind, such as poetry (and presumably philosophy). The other thing Heidegger tells us about τέχνη is that

[f]rom the earliest times until Plato the word *techne* is linked with the word *episteme*. Both words are names for knowing something in the widest sense.... Such knowing provides an opening up. As an opening up it is a revealing. (QCT, p.13.)

The root of 'technology' is τέχνη, a word linked with επιστήμη¹¹, or knowledge. As such, it is connected to revealing. In order for artisans to produce things, they must have knowledge of what is to be made, and of how to go about making it. Since the artisans are building something that was not there before, their task could be described as "reveal[ing] whatever does not bring itself forth and does not yet lie before us, whatever can look and turn out now one way and now another" (QCT, p.13). The artisans' tasks are in revealing novel things, in revealing new houses or chalices.

Whoever builds a house or a ship or forges a sacrificial chalice reveals what is to be brought forth, according to the perspectives of the four modes of occasioning. This revealing gathers together in advance the aspect and the matter of ship or house, with a view to the finished thing

envisioned as completed, and from this gathering determines the manner of its construction. Thus what is decisive in *techne* does not lie at all in the making and manipulating nor in the using of means, but rather in the aforementioned revealing. It is as revealing, and not as manufacturing, that *techne* is a bringing-forth. (QCT, p.13.)

The craftsman reveals the thing being made¹². The manufacturing of the thing is not decisive in τέχνη, rather it is that things are being revealed that is decisive. The work of the craftsman is not in manufacturing, but rather in careful consideration and in the gathering together of what is needed, thus revealing what is to be made. Zimmerman explains the above passage as follows.

Techne as ontological revealing makes possible "production" as we ordinarily understand it. Only because artisans are capable of understanding and disclosing in advance what the envisioned product is, can they do the things needed to gather the thing together, draw it forth, let it be. (Zimmerman, *Heidegger's Confrontation with Modernity*, p.232.)

The revealing of τέχνη makes the production possible. It is the ground for the possibility of production, and as such the revealing is the ground for the possibility of technology.

With this discussion of τέχνη, Heidegger has drawn a connection between technology and truth, between technology and revealing. He says

[t]echnology is a mode of revealing. Technology comes to presence in the realm where revealing and unconcealment take place, where *aletheia*, truth, happens. (QCT, p.13.)

Technology is made possible by revealing, or ἀλήθεια. Despite his misstep of importing German experience into his understanding of Greek words, he has been able to show that it is revealing that makes technology possible. Instrumentality is the essence of technology in the first sense, in the sense of what technology is, but revealing is the essence of technology in the second

sense, in the sense of the conditions of the possibility of technology. Now we should inquire into the nature of this revealing.

Notes

- ¹In making this move from the correct definition of technology to the true, Heidegger has been criticized for ignoring the everyday world and its ontic technological problems such as pollution and deforestation. For more on this see Rorty (p.302) as well as the discussion below in chapter 2.
- ²For a further discussion of Heidegger's use of the term 'true' as opposed to the term 'correct', see below chapter 2, as well as Heidegger's essay "On the Essence of Truth".
- ³For Heidegger, 'Being' is "...that which determines entities as entities, that on the basis of which entities are already understood, however we discuss them in detail" (BT, p.6). This is distinguished from 'beings', which are any objects of consciousness determined by Being.
- ⁴Of course this does not mean that only the Greeks could have an authentic experience. It only means that a culture must make sure it is using words grounded in its *own* experience, rather than trying to import somebody else's.
- ⁵As what is above all responsible for the chalice, the τέλος could be considered the Being of the chalice. In Heidegger's discussion, τέλος serves the role of Being, it determines what the entity is and how we understand it.
- ⁶Heidegger's understanding of τέλος could even be used in situations where τέλος is usually translated as 'end' but is not in the genitive case -- such as sentences like 'at the τέλος [end] of the trip we arrived home'. While τέλος could not be understood as a source in this passage, it could be understood as a context since the trip occurred within a context of returning home.
- ⁷This can be understood more clearly in light of the discussion later in this chapter where Heidegger's claim that the decisive aspect of τέχνη is revealing, not manufacture (QCT, p.13) is considered.
- ⁸This translation of ποιήσις as *Her-vor-bringen* or bringing forth is not in itself controversial -- it is a standard German translation of the Greek word (Pape, p.648), but Heidegger later uses it in a fashion which may be problematic and will be discussed later in this chapter.
- ⁹This expansive use of ποιήσις by Heidegger could be criticized by someone saying that only applies to human work, not to nature. Liddell and Scott seem to support the use of ποιήσις for only human endeavours, but they say that ποιέω, the root of ποιήσις, can be used to describe the work of inanimate and abstract entities.

- ¹⁰Heidegger's defining 'ἀλήθεια' as 'revealing' has been criticized by Friedlander, and his critique will be discussed below in chapter 2.
- ¹¹For more on the connection between τέχνη and ἐπιστήμη, see Plato's *Gorgias*. There Plato explains that every τέχνη has a related ἐπιστήμη, that all skills are bound up with knowledge.
- ¹²Heidegger uses the same language here as when he explains causation, providing a link between that portion of the essay (despite the fact that the link between causation and revealing was broken due to Heidegger's illegitimate use of *hervorbringen*) and the present discussion.

Chapter 2: The Truth of Technology

At the end of the last chapter, we saw how Heidegger draws a connection between truth, or revealing, and technology. In this chapter I discuss the way Heidegger believes revealing takes place in the modern technological age, and two objections to Heidegger's position are considered. First, Richard Rorty's claim that in his emphasis on the conditions which make technology possible Heidegger avoids facing the dangers modern technology poses immediately before us is considered. After that, Don Ihde's alternative view of how modern technology influences our behavior is discussed.

Before we discuss the kind of revealing Heidegger considers to be prevalent in modern technology and the objections to that view, we should first consider what it means to reveal, what Heidegger means when he talks about revealing. An objection to Heidegger's reading of truth as revealing is discussed, and in doing this Heidegger's essay "On the Essence of Truth" is considered.

When Heidegger says the essence of truth is revealing, he is not merely saying that truth is the showing of physical objects to us. He is not saying that truth is the same as seeing. Instead, he is speaking about the context of understanding we use which makes our specific encounter and explanation of the things around us possible. This does not mean that Heidegger is denying the our physical surroundings or their importance, he is merely saying that our encounter with them inextricably connected with our context of understanding.

Heidegger explains his understanding of truth as revealing by using a reading of the Greek word for truth, ἀλήθεια. That word literally means

'unconceal' -- it is composed of the root λήθω, a verb meaning 'to conceal', and an alpha privative, α-, which negates the root word. This reading of ἀλήθεια has been criticized by Paul Friedlander, who claims that the Greeks did not use the word ἀλήθεια to say 'unconcealment.' He argues this by first casting doubt on the Heideggerian etymology. Friedlander does this by showing that the Greeks rarely used λήθω as an opposite to ἀλήθεια. Instead, the opposite was usually ψεύδος, which we understand as 'false'.

Friedlander notes that

...ψεύδος, ψευδής, since Homer the usual opposite to ἀλήθεια, ἀληθής, and another opposite, ἀπάτη, 'deceit' or 'deception,' are apparently non-Indo-European. Thus ἀληθής, which belongs to the same semantic domain, is perhaps not at all ἀ-ληθής, just as the interpretation... ἀ-κριβής [accurate] and ἀ-πάτη [deceit] would impose upon these words an alpha privative that hardly belongs to them and that seemingly does not even help us in understanding them. (Friedlander, p.222.)

From this Friedlander concludes that ἀλήθεια may not be an alpha privative construction. Like other words, such as ἀκριβής and ἀπάτη, ἀλήθεια may be a word with the appearance of an alpha privative but that is not actually constructed in that fashion. This would be similar to removing the prefix 'un-' from the English word 'uncle'. Despite the apparent presence of the prefix, 'uncle' is not a compound word, and reading it 'un-cle', or 'not a cle' does not enhance our understanding of that word. In the same way, Friedlander argues that it may be a mistake to read 'ἀλήθεια' as 'ἀ-λήθεια.' He is claiming that just as removing the 'un' from 'uncle' leaves us without a root word, the removal of the alpha from 'ἀλήθεια' leaves us without a root. Friedlander is saying that the appearance of λήθω in ἀλήθεια may be an illusion -- the word may not really be constructed that

way, the apparent connection between truth and unconcealment is merely coincidental.

Friedlander admits that this is not a completely convincing argument, saying "...it would be rash to conclude anything from this 'perhaps,' just as it would be rash uncritically to make the other etymology the basis for a far-reaching conclusion" (Friedlander, p.222). He admits that he does not have an airtight argument for this alternative etymology of ἀλήθεια, but Friedlander compares this to Heidegger's etymology, and says that it would be foolish to make any far-reaching conclusions from either etymology.

After acknowledging the weakness of his etymological claim against Heidegger, Friedlander offers a second argument against Heidegger's understanding of ἀλήθεια. This argument is based upon the uses of ἀλήθεια in ancient Greek texts. Friedlander claims that ἀλήθεια is not used as 'unconcealment' by the Greeks. He says that if we consult dictionaries and examine the usage of ἀλήθεια in the tragic poets, the historians, and the orators, we find that

...the words ἀληθής, ἀλήθεια can be grouped under three headings. They signify (1) the correctness of speech and belief, (2) the reality of being, (3) the genuineness, truthfulness, and conscientiousness of the individual or character - "existence" in the present sense, i.e., "the truth which I am myself" (Jaspers). The interpretation of truth as "unhiddenness" is barely possible, now and then, under the second group; in most cases, however, it would be misleading and would falsify the matter to a point of absurdity. (Friedlander, p.224.)

Friedlander says that none of the three common uses of ἀλήθεια readily lend themselves to a reading as 'unconcealment'. While he admits that occasionally Heidegger's reading is possible in the second group, when ἀλήθεια is used to discuss the reality of being, Friedlander claims that such situations are very rare, and that a reading of 'unconcealment' would usually

falsify the matter at hand, rather than clarify our understanding of Greek thinking.

The second critique of Friedlander's, that the word ἀλήθεια was not used as 'unconcealment' by the Greeks, deserves a reply. The usages Friedlander raises as examples arose after ἀλήθεια became a term, once it lost its primal meaning through the works of the philosophers. When introducing his discussion of the usage of ἀλήθεια, Friedlander says "[i]f... we inquire into later usage, for instance, in the tragic poets, the historians, or the orators..." (Friedlander, p.224) we will find that ἀλήθεια was not used as 'unconcealment'. Heidegger is not concerned with the later usages of ἀλήθεια, however. He is trying to recapture the original force of the word¹. Heidegger is concerned with what was going on when people used 'ἀλήθεια' in the first place and set off the tradition which we find ourselves in today. The later usages Friedlander refers to are signs of where the tradition of western thought travelled, not of where it began. Heidegger would say that Friedlander is using as examples situations where the 'common understanding' has already been levelled off "to that unintelligibility which functions as the source of pseudo-problems." The usages Friedlander cites as objections to Heidegger are precisely the usages that Heidegger is trying to by-pass in order to understand ἀλήθεια.

Another objection to Friedlander's critique is that Friedlander himself admits that on some occasions Heidegger's reading is plausible. Even if it was only rarely that ἀλήθεια was intended as 'unconcealment' by the Greeks, that minimal usage tells us that the Greeks did read the word in that way. Such occasional uses, coupled with the visible similarities between ἀλήθεια and λήθω, suggest a tacit understanding by the Greeks that truth is unconcealment. Even if ἀλήθεια did not actually derive from λήθω, the

common structure of the two words would imply an understanding of 'unconcealment' to the users of these words, and Friedlander agrees that the Greeks did occasionally use the words in this way.

To Friedlander's etymological objection to Heidegger, no direct reply is needed. Friedlander himself admits that his etymological critique is weak and that no conclusions should be drawn from it. He says it would be rash to conclude anything from his etymology, but also says it would be "rash uncritically to make the other [Heidegger's] etymology the basis for a far-reaching construction" (Friedlander, p.222). Friedlander admits that his etymological claims are not airtight, but claims that Heidegger's etymologies are equally questionable.

In answer to this, it could be shown that Heidegger does not rely solely on the controversial etymology of ἀλήθεια for his understanding of truth as unconcealment. Heidegger gives an argument for accepting truth as unconcealment in "On the Essence of Truth" which does not depend on his reading of ἀλήθεια, and while this does not prove that his etymology is correct, it does provide evidence that truth should be understood as unconcealment.

In his essay "On the Essence of Truth," Heidegger offers an explanation of what truth is, and why we should understand it as revealing. Heidegger does this by examining what he calls the common sense notion of truth.

Common sense deals with the everyday phenomena of the world, and defends itself by "appeal to the 'obviousness' of its claims and considerations" (Heidegger, "On the Essence of Truth, hereafter *OET*, p.118). The common sense notion of truth, which is also the notion of truth held by the inheritors of the Western philosophical tradition, cannot be denied, for we live our day to

day lives guided by the obvious practicality of it. The common sense notion of truth is truth as accordance (or correctness). This accordance can take two forms.

Being true and truth here signify accord, and that in a double sense: on the one hand, the consonance of a matter with what is supposed in advance regarding it and, on the other hand, the accordance of what is meant in the statement with the matter. (*OET*, p.119.)

The first type of accordance Heidegger mentions is an accord between matters at hand and what the matter is supposed to be. For example, we know something is true gold when it corresponds to the definition of gold. If we have fools gold, or copper, or anything else, we do not have an accordance with real gold, and so we do not have true gold. Secondly, Heidegger says that truth can be a correspondence between a proposition and the matter at hand. "A statement is true if what it means and says is in accordance with the matter about which the statement is made" (*OET*, p.119). The meaning of the statement or proposition is in accordance with the matters at hand, and so the statement is true.

Heidegger accepts truth as correctness, but asks how it is possible that two things as dissimilar as a proposition and a physical object could be in accord. He gives the example of a comparison between a coin and the statement 'this coin is round'. Heidegger explains the difficulty in stating the nature of the correspondence between these two things, saying

...[b]ut wherein are the thing and the statement supposed to be in accordance, considering that the relata are manifestly different in their outward appearance? The coin is made of metal. The statement is not material at all. The coin is round. The statement has nothing spatial about it.... But in spite of all their dissimilarity the above statement, as true, is in accordance with the coin. (*OET*, pp. 122-123.)

The statement and the coin have an apparently insurmountable gulf between them, yet nobody would deny that they are in accord. They have no similar

properties, the statement is not made of material and has no spatial dimensions, and the coin is not composed of words from a language, but common sense and Heidegger both say that there is an accordance. Heidegger explains this accordance by saying that the coin and the statement are related due to the way the statement 'presents' the coin. He says

...the statement regarding the coin relates 'itself' to this thing in that it presents it and says of the presented how, according to the particular perspective that guides it, it is disposed. (*OET*, p.123)

The statement presents the coin, puts it forward as an object standing opposed to the statement. The statement does not accord with the coin by being similar to it, but by separating itself from the coin and letting the coin stand opposed as an object. This presenting takes place in an open region, thus the object can cross the open region, or field of openness, and stand in opposition.

This appearing of the thing in traversing a field of opposedness takes place within an open region, the openness of which is not first created by the presenting but rather is only entered into and taken over as a domain of relatedness. (*OET*, pp.123-124.)

By crossing the field of openness, the thing is disclosed as separate from the presentative statement, and can be understood as a thing as such. This open region could be called a context of understanding. It is within an openness, or within a context of understanding, that objects are presented and stand opposed as objects as such. The context of understanding is not created by the presenting of the object, but it is instead prior to the presentation, and makes the presentation of the object possible. As Biemel explains "[t]he domain of the open is not created by the representing subject; on the contrary, the latter has to place himself also in this sphere" (Biemel, p.81). Biemel expands on this point, saying that the reader may initially believe Heidegger is

claiming that the openness is created by humans and through it we can understand and thus control entities. This understanding of Heidegger misses the point, however, since Heidegger explicitly rejects this interpretation. Biemel explains the error in such an interpretation of Heidegger's position, saying

...[t]his is not what is said here; rather, every activity or relationship has its basis in the openness in which man is placed. Rightness as explained previously, in the sense of approximation to an entity that has become representable, is possible only when Dasein is conceived as an entity that is overt. (Biemel, p.86.)

We do not create the openness, but rather we participate in it, we must be in the openness ourselves. This openness makes it possible to understand the object. Without a context of understanding, it would be impossible to understand the object, and so the presentation could not happen without an already existing field of openness. The presentation does not create the context of understanding because the presenting requires the openness. Openness makes the presenting possible.

Heidegger calls the relation between the object and the presentative statement a *comportment*. The comportment discloses the object, and this disclosure takes place within the context of understanding, within the field of openness.

[A]ll comportment is distinguished by the fact that, standing in the open region, it adheres to something opened up *as such*. What is thus opened up, solely in this strict sense, was experienced early in Western thinking as "what is present" and for a long time has been named "being". (OET, p.124.)

The comportment discloses, or 'opens up' what is present as a particular thing. In doing so, the comportment discloses being, or, more accurately, being as such. The comportment discloses a particular being, not being as a whole or Being.

Heidegger believes that the disclosive relationship of comportment is made possible by freedom. He says "[t]he openness of comportment as the inner condition of the possibility of correctness is grounded in freedom" (*OET*, p.125). This freedom is not the freedom espoused by modern liberalism. He is not claiming that "free will" or 'freedom of choice' are what make comportment possible. Instead he is saying "[f]reedom for what is opened up in an open region lets beings be the beings they are. Freedom now reveals itself as letting beings be" (*OET*, p.127). This is not to say that we should disengage ourselves from beings. To let beings be is not to avoid them, it is not leaving them alone². In order to let them be you must first engage them, disclose them in the field of openness. It is only in disclosure of beings that you can let the beings be by accepting them as they are opened up in the context of understanding.

It is during this discussion of freedom that Heidegger introduces the Greek word ἀλήθεια into his discussion of truth. He says

...[t]o let be - that is, to let beings be as the beings which they are - means to engage oneself with the open region and its openness into which every being comes to stand, bringing that openness, as it were, along with itself. Western thinking in its beginning conceived this open region as *ta aletheia*, the unconcealed. If we translate *aletheia* as "unconcealment" rather than "truth," this translation is not merely more literal; it contains the directive to rethink the ordinary concept of truth in the sense of the correctness of statements and to think it back to that still uncomprehended disclosedness and disclosure of beings." (*OET*, pp.127-128.)

Heidegger has brought the discussion of truth as correctness to a discussion of truth as unconcealment, as ἀλήθεια. This argument did not depend on the etymology of ἀλήθεια, however. Instead, Heidegger has found that truth is revealing by examining how the common sense notion of truth as accordance could be possible.

One may try to object to Heidegger's understanding of truth as revealing by saying that what Heidegger says is not evident to us, that it is not part of the common sense notion of truth. Such a critic may say that since we do not normally experience truth as revealing, Heidegger's explanation of truth is nothing more than a fairy tale³.

To this sort of criticism, Heidegger has two possible replies. First, he could say that he is not looking for what the common sense notion of truth is, rather he is trying to find the condition for the possibility of that common sense notion of truth, truth as accordance.

Secondly, Heidegger has an explanation for why truth as revealing is not evident for us. He says that letting beings be leads to concealment. Because we let beings be, we are unable to see the region of openness. Heidegger says "[p]recisely because letting be always lets beings be in a particular comportment which relates to them and thus discloses them, it conceals beings as a whole" (*OET*, p.132). Our attention to and acceptance of the particular beings prevents us from noticing being as a whole. When presenting and disclosing beings, we have our attention focussed on the particular, and in doing so, we lose sight of the openness which makes the disclosure possible. The concealment of the context of understanding is due to our ability to understand particular beings.

Ortega makes a similar point in his *Meditations on Qixote*. There he discusses the proverb 'one cannot see the forest for the trees,' explaining that our attention to particulars hides the background which makes those particulars possible. Ortega says that we cannot see a forest, we can only see particular trees, but that this does not mean the forest does not exist. In fact, the particular trees also make up the forest, they make the forest possible. Ortega says

...[t]he trees do not allow the forest to be seen, and it is due to this fact that the forest exists. The function of the visible trees is to make the rest of them latent, and only when we fully realize that the visible landscape is concealing other visible landscapes do we feel that we are in a forest. (Ortega, p.61.)

The trees which we see make the other trees latent, they hide the other trees. We only realize we are in a forest when we figure out that the trees we see are concealing the rest of the landscape, therefore the particulars we see make our understanding of the context possible. As long as we focus on the particular trees before us, we cannot notice the surrounding forest, "[t]he forest is latent as such" (Ortega, p.61). Ortega thinks that the forest can *never* be made a determinate object of consciousness, no matter how exhaustive the enumeration of trees is. Seeing the forest is not simply a matter of seeing enough trees, the forest is latent because we always are looking at the individual trees.

This is similar to Heidegger's claim that because of our focus on the particular beings disclosed to us, we fail to notice the context within which those beings are disclosed. In both Ortega's argument and Heidegger's, the particular beings or trees prevent us from noticing the context which surrounds them and makes the particulars possible. Both the forest and the context of understanding are invisible to the observer.

The critic of Heidegger may reply that we should notice this concealment of our context of understanding, but Heidegger claims that we are also prevented from noticing that concealment. There is another concealment, a double concealment, which Heidegger refers to as mystery. "In letting beings as a whole be, which discloses and at the same time conceals, it happens that concealing appears as what is first of all concealed" (OET, p.133). The mystery is the concealment of the concealment, we are

doubly deceived because letting beings be leads to the concealment of Being, and this concealment is also concealed from us. We cannot see the context of understanding which makes it possible to understand anything at all. We also cannot see that this context is concealed from us. In our everyday dealings with the world, we lose sight of Being as a whole, of our context of understanding.

Now we should turn back to the question of technology, and we should consider the type of revealing prevalent in the modern technological world. It is this revealing that Heidegger considers the danger of modern technology. The significant danger of modern technology is not in the instruments, it is not the ontic⁴ danger of particular pieces of modern technology. In "The Thing" Heidegger points out that the danger to us is not a technical apparatus such as the atomic weapons we have created, but the way of thinking which makes such a weapon possible. He says "the atom bomb and its explosion are the mere final emission of what has long since taken place, has already happened" (Heidegger, "The Thing", p.166). The danger is not in the bomb, but in our way of thinking. The terror of modern technology

...shows itself and hides itself in the way in which everything presences, namely, in the fact that despite all conquest of distances the nearness of things remains absent. ("The Thing", p.166.)

The terror is in how things are revealed in our context of understanding. It is not the instruments themselves that are non-neutral, but the way they 'presence'. Of course, Heidegger is not denying that the instruments of technology can and do pose a direct physical threat to people. What he is saying is that such ontic dangers are made possible by the ontological danger of modern technology. The danger is in the way the objects come to

presence, the way they are revealed in our context of understanding. In order for us to deal with the ontic dangers, we must face the ontological danger.

Heidegger characterizes the context of understanding of modern technology as Enframing. This is a way of thinking where we consider all things as standing-reserve, as objects waiting for people to use them. He says "[w]here Enframing holds sway, regulating and securing of the standing-reserve mark all revealing" (QCT, p.27).

Heidegger arrives at this explanation of the modern technological mode of disclosure after discussing how modern people relate to their environment. He explains

...[t]he revealing that rules in modern technology is a challenging, which puts to nature the unreasonable demand that it supply energy that can be extracted and stored as such. (QCT, p.14.)

The context of understanding that dominates in modern technology challenges nature -- it demands energy which can be forcibly removed and then stored for later usage. Heidegger contrasts this with the use of an old windmill. The windmill, according to Heidegger, does not challenge nature in this way, instead it simply works with the wind, it is blown only when the wind blows -- it makes no demands, but instead makes use of what nature offers forth. Modern technology, on the other hand, is not so subtle in its courtship of nature. It demands energy from nature, "...a tract of land is challenged into the putting out of coal and ore. The earth now reveals itself as a coal mining district, the soil as a mineral deposit" (QCT, p.14). The coal mine is an attack on nature, a tearing of the earth to extract the fuel needed to power the machines of modern technology.

Heidegger's contention that land is revealed as a coal mining district or as mineral deposits is hard to deny, an examination of the way people speak

about the land as well as the way they treat it will confirm Heidegger's claim.

His belief in the innocence of the windmill may be harder to justify, however.

Zimmerman observes that

...[p]resumably, Heidegger's point here is that windmills somehow "let the wind be wind," since wind cannot be forced to blow except where it does blow. While he may have been correct in some ways about this matter, he was clearly naive in his use of the windmill as an instance of pre-technological equipment.... [I]n Livermore, California, thousands of turbo-driven windmills cover the hills for as far as the eye can see. The wind's energy is, in fact, being harnessed and stored to produce electricity. (Zimmerman, *Heidegger's Confrontation with Modernity*, p.216.)

While Zimmerman accepts Heidegger's assertion that the windmill cooperates with nature in a way that the coal mine does not, he thinks that Heidegger's discussion of the windmill fails to recognize that the windmill could also be used in a fashion which challenges nature for energy to be stored. The obtrusive 'wind farms' of California use the windmill to generate and store vast amounts of electricity. Other than the ontic difference in the damage done to the landscape, there seems to be little separating the activities of strip-mining and the wind collection exemplified in Livermore.

Zimmerman's argument could be countered by Heidegger. The objection is that while Zimmerman is correct in saying that the windmill is now used in a fashion similar to the strip-mine, this does not affect Heidegger's point. Heidegger is not necessarily saying that the windmill is a tool which *must* be used in a fashion which does not challenge nature. Instead, he is saying that the way the windmill has been used has been in a context of revealing which did not make demands of nature. Just as there is a difference between the revealing of the peasant farm and of the modern agri-business, there is a difference between the solitary windmill run by the village for the milling of grain and the wind farm used for the generation of electricity. Rather

than weakening Heidegger's claim, Zimmerman's example could be seen as strengthening Heidegger's point. The wind farm is an example of what happens when an instrument is revealed in the realm of modern technology -- the peasant's equipment becomes another source of energy for the machinery of modern technology.

Heidegger goes on to say that modern technology sets upon nature, that it "sets upon it in the sense of challenging it. Agriculture is now the mechanized food industry. Air is now set upon to yield nitrogen, the earth to yield ore..." (QCT, p.15). While the peasant farmer set the field in order, this meant that the farmer was taking care of the land, maintaining it. The setting upon of modern technology does not take care of the land, but rather challenges it. The peasant does not challenge the soil, but instead "places the seed in the keeping of the forces of growth and watches over its increase" (QCT, p.15). The technological farmer does not work with the soil, but instead works within a mechanized food industry, setting upon the soil and demanding the production of larger yields for sale to distant markets.

Heidegger also points out that this setting upon is directed towards the stockpiling of the resources extracted from nature, and that this stockpiling is so that they may be used elsewhere.

The coal that has been hauled out in some mining district... is stockpiled; that is, it is on call, ready to deliver the sun's warmth that is stored in it. The sun's warmth is challenged forth for heat, which in turn is ordered to deliver steam whose pressure turns the wheels that keep a factory running. (QCT, p.15.)

Nature is challenged forth in order to produce goods which are then transported and stored somewhere, waiting to be used. Heidegger gives the name *Bestand*, or 'standing-reserve', to the things revealed in this fashion. Standing-reserve "designates... the way in which everything presences that is

wrought upon by the challenging revealing" (QCT, p.17). The coal from the mine, the grain from the fields, and even the electricity produced by the Livermore wind farm are all standing-reserve -- they are disclosed to us with the challenging revealing of modern technology.

Heidegger says that people do not control the way of revealing. Just as he argued in "On the Essence of Truth," he says that "man does not have any control over unconcealment itself" (QCT, p.18). All of our thoughts and actions take place within the unconcealed, we do not chose the type of revealing we live within. This means that we ourselves have been 'ordered' into a way of thinking that considers everything standing-reserve. Heidegger names this "challenging claim which gathers man thither to order the self-revealing as standing-reserve: 'Ge-stell' [Enframing]" (QCT, p.19). *Gestell*, or 'Enframing', is the way of revealing that has gathered humanity in such a way as to consider everything standing-reserve.

Enframing is exhaustive as a mode of revealing -- all revealing occurs within this context. We understand everything as standing-reserve, as resources waiting to be calculated and ordered before being used by people. It opens up the world to us in a certain way, which will lead us to act in a certain fashion. This non-neutrality manifests itself both ontically and ontologically. If all the world appears as resources to be used, instruments to be manipulated, then that way of thinking will guide us into building power plants on the Rhine, and inventing atomic weapons. This way of thinking also blocks out other ways of thinking.

Enframing... threatens to sweep man away into ordering as the supposed single way of revealing, and so thrusts man into the danger of the surrender of his free essence. (QCT, p.32)

The pervasiveness of Enframing blocks out other kinds of revealing. We are swept away from other modes of understanding, from other ways of looking at the world. Enframing leads to ontic problems, such as the threat of pollution or nuclear holocaust, but more seriously for Heidegger, it first leads to destining of revealing which tends to block out all other modes of revealing as marginal or irrational. Enframing prevents us from understanding the world in any terms other than standing-reserve. This is not meant to imply that other ways of thinking would neither exist nor have any effects, but Heidegger believes no other ways of thinking hold sway in our epoch while sweeping other revealings aside as marginal or irrational.

It is important to not confuse the universality of instrumentality with the hegemony of Enframing. Instrumentality is universal -- people in all epoches throughout history have used tools and have calculated means to ends. This universality is not the same as the hegemony of modern technology, however. The fact that we see the instruments of modern technology all around us is not a sign of the hegemony of modern technology, but is rather ontic evidence of the universality of instrumentality. The hegemony of technology is ontological. It is not seen in the instruments we use or in the effects of instrumental reasoning on human psychology, but instead in the mode of revealing which prevails in our epoch. Enframing is also not a conceptual framework which we have willingly created in order to explain the world around us. Enframing is a mode of unconcealment which makes *modern* technology possible, but which blocks off other modes of unconcealment. It is a way of revealing tied to our current historical situation which prevents people from understanding things other than as standing-reserve.

One critique of Heidegger's notion of *Gestell* is that it abandons the ontic problems of modern technology and instead concentrates on the

ontological. In this way Heidegger makes the traditional philosopher's error of leaving the everyday world of practical affairs and instead moves into the abstract, impractical world of the philosopher. This type of critique can be seen in Rorty, who says

Heidegger's hope is just what was worst in the tradition -- the quest for the holy which turns us away from the relations between beings and beings (the relations, for example, between the ghastly apparatus of technology and the people whose children will die of hunger unless that apparatus spreads over the rest of the planet). (Rorty, p.302.)

Rorty is complaining that Heidegger has turned his back on the ontic problems of modern technology, avoiding the difficult questions what we are to do in the face of problems such as world hunger which seem to demand an embracing of modern technology as the only possible solution⁵. Rorty thinks that when Heidegger moves the discussion of modern technology to a discussion of Being, he is making the same kind of mistake made throughout the history of philosophy. Despite Heidegger's reformulation of the notion of truth, and his introduction of Enframing as the essence of modern technology, Heidegger has not divorced himself from the philosophical tradition, and so he cannot solve the problems of that tradition. Rorty continues saying

Heidegger's attachment to the notion of 'philosophy'... is simply the sign of Heidegger's own fatal attachment to the tradition: the last infirmity of the greatest of the German professors. It amounts to saying that even though everybody who has previously counted as a paradigm of philosophy -- Plato, Thomas, Descartes, Nietzsche -- turned out to be a step on the path toward chaos, we must still try to be philosophers. (Rorty, p.302.)

Rorty believes that Heidegger is clinging to a tradition of philosophy which is unable to deal with problems like modern technology, which does not engage with the difficult situations which arise in the face of modern technology.

Heidegger cannot provide a practical reply to modern technology, instead he retreats to the impractical world of the philosophers.

One problem with Rorty's critique is that Heidegger does not tell us to do nothing in the face of problems like mass starvation. In his "Letter on Humanism", he instructs us to do exactly the opposite. There, when discussing the role of traditional ethical bonds within the gathering and ordering corresponding with modern technology, Heidegger says

...[w]ho can disregard our predicament? Should we not safeguard and secure the existing bonds even if they hold human beings together ever so tenuously and merely for the present? Certainly. But does this need ever release thought from the task of thinking what still remains principally to be thought and, as Being prior to all beings, is their guarantor and their truth? (Heidegger, "Letter on Humanism," p.232)

Heidegger is saying that we should not turn away from conventional morality, that we should continue to act morally in this modern technological age. This means we should try to help the starving children of Rorty's example, we should not cruelly avoid the ontic problems around us. Heidegger is not proposing that we hide from the situation around us, that we ignore the ontic problems of modern technology. Instead, he is saying that while we should act within the morality of the age, we should continue to think about the problems of philosophy, about Being.

The second problem with Rorty's critique is that it is possible that the kind of action he imagines we should undertake (and which he believes Heidegger is ignoring), may in fact prove to make the problems worse rather than better. The technological fixes to problems such as world hunger which Rorty raises as a dilemma for the Heideggerian often lead to more serious problems than they solve. Examples of this can be seen in the poisoning of water supplies with the pesticides, herbicides and fertilizers utilized in modern

technological farming, as well as in the deforestation of the rainforest to provide farm land and pastures for cattle. Zimmerman points out that Heidegger

...understood that humanistic activism often leads to greater problems than the ones it "solves." The drive to control malaria in certain countries, for example, was well-intentioned and largely successful at first. But the elimination of malaria led to such overpopulation that in some countries more people are starving than ever before. Moreover, malaria is making a comeback as the malaria mosquito grows resistant to insecticides. The humanistic Western tradition is leading us to a situation with which the prevailing norms may not be able to cope. (Zimmerman, "Toward a Heideggerian *Ethos* for Radical Environmentalism", p.124.)

The technological solutions proposed by our humanistic morality often create new problems in the place of the ones they supposedly solve. Not only is the Rorty criticism of non-action misplaced against Heidegger, but it seems that action of the sort desired by Rorty seems to bring about just as many, if not more, problems than it solves.

Heidegger could also criticize Rorty for failing to see that some ontic problems raised by modern technology have no simple, economically feasible ontic alternative. Our need for vehicles of mass transportation -- everything from bicycles to space shuttles -- puts a tremendous strain on the environment in terms of both pollution as well as resource depletion. There is no simple quick technological fix which will rid us of our needs for fossil fuels and the pollution they bring as well as our need for the mining of minerals from the earth in tremendous quantities. In these cases only a radical rethinking of the way of life could lead to a solution. In questioning modern technology Heidegger is not avoiding the solutions to these problems, because there are no easy technological solutions.

Rorty is suggesting that we continue to take the managerial approach to the ontic problems around us, to continue to use the calculating ordering way of thinking when facing technological problems. It is precisely this type of thinking that Heidegger is trying to bring into question, however. While Heidegger is not suggesting a withdrawal from modern technology, a rejection of the technological solutions to the problems we face, he is saying that we should question these technological solutions and the way of thinking they arise from. Rather than the avoidance of the ontic problems around us, Heidegger advocates an engagement with Being to go along with our actions in the everyday world.

Another critique of Heidegger can be found in Don Ihde's book *Technics and Praxis*. While Ihde does not give direct counter arguments to Heidegger, he does offer an alternative account of the relationship between human thinking and technology. Instead of talking about how our way of thinking leads us to consider the world as standing-reserve, Ihde believes that the type of instruments we use alters our experience of the objects we study, and thus alters the way we think about the world. He gives the example of a dentist's probe. Ihde says "the use of the probe transforms direct perceptual experience" (Ihde, p.21). Using an instrument enhances some aspects of the experience of the tooth, while reducing others. The dental probe gives the dentist a heightened sensitivity of the texture of the tooth, a sensitivity not possible without the probe. Conversely, the dentist cannot feel the wetness and warmth of the tooth with the probe. The dental probe changes the dentist's experience, causing blindness to some qualities while enhancing the experience of others.

This alteration of our experience leads to changes in the way we think about the world. The type of instruments we use can affect the type of

projects we pursue. Ihde does not think technological instruments determine our actions, but he thinks it does incline us to behave in certain ways. He says

...there are latent telic *inclinations* which are made possible through the use of instruments, inclination which favour certain rather than other directions. (Ihde, p.42.)

Ihde gives the example of a pen and a typewriter, and how they lead to different writing styles. The pen is more conducive to a slower, more thoughtful writing style. The typewriter, on the other hand, can lead to a more colloquial or journalistic style due to its speed. The instruments do not determine our style, but incline us to use one style over the other. It is possible to write thoughtfully on a typewriter, or journalistically with a pen, but we are inclined to do the opposite. The ontic effects of the instrument lead us to behave in different ways. The tool transforms our experience, and in so doing, changes our behavior.

Ihde does not use Heidegger's notion of an ontological difference, he does not consider there to be a difference between the ontic and the ontological, between the context of meaning which makes modern technology possible and the effects of technology which we experience within that context of understanding. Because of this, Ihde's discussion concentrates on what Heidegger would call the ontic effects of technology, and how the ontic can effect our way of behaving. He considers a case where advanced microscopy allows us to see things invisible to the naked eye. In a situation like this, we may begin to consider the microscopic world to be more 'real' than the phenomena we can see with our unaided eyes.

Suppose that I believe that the instrument is the very model of precision and perfection. Then I begin to believe that my eyesight is very limited, that it hides more from me than I see. And the superiority of the instrument mediated 'world' is what lies underneath (if not behind) the mundane world.... The instrumentally constituted 'world'

becomes the 'real' world. Not only do I forget the mundane world, but it begins to be downgraded. (Ihde, p.46.)

In this situation, the technological instrument leads us to believe that there is another, more real, world than the one which we experience daily. The instrument colours our understanding of reality.

In Ihde's examples, the probe and the microscope optically change our experiences by enhancing some sensations and diminishing others. In so doing the instruments can change our understanding of both the particular objects around us, and of the world at large. Ihde sees the ontic experience altering our ontological understanding. We posit as real what we can 'see' using instruments. We use our ontic experience in formulating our ideas about the world.

Heidegger would criticize this view as correct, but not true. Ihde's analysis of instrumentality exposes our ontic dealings in the world and holds them up for consideration. It does not, however, get beyond the anthropological instrumental definition of technology. Heidegger would not call Ihde wrong, but Ihde could be criticized as not being true. Ihde does not talk about the conditions for the possibility of technology, about the *essence* of technology in the second and third senses of essence, only about particular instances of instruments. In expanding the discussion of the ontic, Ihde reduces the role of the ontological. This removes what Heidegger considers to be the source of our modern technological way of living. Heidegger believes our way of thinking is what influences our behavior, and it is that way of thinking that is the real danger of modern technology. Ihde ignores the ontological, and in so doing, he never transcends our ontic dealings to get to what Heidegger considers the real problem. Ihde never considers the conditions necessary for us to use instruments, that we must think in a certain

way before we begin to even use a dental probe. Ihde gives a good discussion of the effects instruments can have on our way of thinking about the world, but he forgets to mention how it can be possible to use those instruments in the first place. Ihde's theory can be subsumed into Heidegger's, as an explanation of how instruments effect us once we are already within a technological context of understanding.

This cannot be taken as a knockout punch for Heidegger, however. Ihde can criticize Heidegger for an overemphasis on the ontological. Ihde sees our ontic experience as of primary importance in forming our technological way of thinking. It is our use of instruments, and the resulting transformation of experience, which leads to our technological way of thinking. It is our use of instruments, and the resulting transformation of experience, which leads to our technological way of thinking. Ihde could say that Heidegger has fallen prey to the technological way of thinking himself, that his analysis of instruments has led him to believe in a 'world' more real than the physical world around us. Just like the microscopist, Heidegger rejects this mundane world for a more real one which cannot be perceived with our senses alone. Heidegger rejects the physical world in favour of an ontological one. The ontic is replaced with the ontological as the primary basis of our dealings with the world. Ihde rejects this, and instead says it is our ontic dealings which influence our way of thinking.

Both of these philosophers discuss our lives in a technological world, but they differ on several key points. Because this style of argument does not allow itself to be judged by external criteria (for both men believe that we cannot have a truly external point of view), we cannot appeal to some external authority to decide who's theory is the better. Instead we must appeal to our intuitions, and see which of the stories provided seems to be the stronger.

Both stories have their flaws. Ihde does not consider the conditions required for the possibility of technology to be an issue, he ignores the ontological. Heidegger, on the other hand, reduces the importance of our ontic dealings with the world, considering them unimportant. Both of these are problems which cannot be overlooked, but neither undercut the projects proposed by their authors. It seems to me, however, that Heidegger's flaw is easier to ignore. He does not avoid discussion of the ontic, but instead situates the ontic within a context of understanding. While he may reduce the role of the ontic too much, he does include it in his theory. Ihde does not make room in his discussion for the ontological, however. It seems that some recognition must be made of how it is possible for us to use instruments, of the context of understanding required for us to use equipment.

Heidegger explains that he believes that modern technology is made possible by the way things are revealed to us. He thinks that the essence of technology, in the second sense of essence, is Enframing -- a way of revealing which reveals everything to us as standing-reserve, as resources to be calculated, ordered, and consumed.

This conception of modern technology is criticized by Rorty as avoiding the physical dangers we face in the world today, but Heidegger can defend himself from this claim by saying that many technological problems defy technological solutions, that the solutions to many problems of modern technology requires us to rethink our relationship to technology and the lifestyle it imposes upon us. Ihde offers an alternative view of technology, that the instruments of technology colour our experience of the world. Heidegger would deny this account, however, since it downplays the role of the ontological in our experience.

Now that we have discussed Heidegger's notion that the essence of modern technology is Enframing, a way of revealing things, we can move on and consider what Heidegger believes is the danger of modern technology and why he believes that art may be able to save us from that danger.

Notes

- ¹See chapter 1 for more on Heidegger's desire to preserve the force of words.
- ²This also could be considered a refutation to the critique Rorty levels against Heidegger discussed later in this chapter. Rorty accuses Heidegger of promoting a disengagement with the everyday world around us, however Heidegger can be read as encouraging an even more intense engagement, one that requires thinking along with action.
- ³This criticism could be used against all philosophy, however, since all philosophy involves reconsideration of 'common sense', of the usual understanding of things.
- ⁴A brief explanation of terminology may be useful here. Heidegger uses the term 'ontic' when he refers to anything which can be a determinate intentional correlate. This would include both our physical surroundings and the abstract principles and ideas we use when we consider that physical world. The ontic is contrasted with the 'ontological', which refers to the non-objective context of meaning which precedes and makes intentionality possible. The ontological, our context of understanding or way of revealing/truth, makes the ontic, our everyday lived experience, possible. Ontic danger, then, would mean the danger of modern technology in the common, everyday sense -- the physical danger imposed by technological instruments such as nuclear reactors and pesticides used in industrial farming practices, as well as the dangers of alienation, lack of self-esteem, etc., which may be caused by living in a modern technological society and having dehumanizing jobs such as fast food preparation, convenience store clerk, or assembly line worker.
- ⁵This type of criticism is also discussed by McWorther, who says "Heidegger frustrates us. At a time when decisive action is so urgently called for, Heidegger apparently calls us to do -- nothing" (McWorther, p.3).

Chapter 3: The Danger and the Saving Power of Art

In this last chapter it is shown that Heidegger believes that modern technology is made possible by a way of revealing/truth -- Enframing. In this final chapter it is explained that this mode of unconcealment is also considered to be the danger of modern technology by Heidegger, and that art may be able to foster a saving power in the face of this danger. Heidegger does not make it clear exactly how art is supposed to fulfil its role, so potential ways that art may save us from technology are considered.

Enframing, the way of revealing which makes modern technology possible, is seen as dangerous by Heidegger. The danger lies in the fashion that the essence of modern technology reveals to us, that it blocks off other possible ways of revealing. Enframing prevents us from experiencing the world within any other context of understanding¹. He claims that the danger of modern technology is not in the technological machine or apparatus, but in the Enframing. Heidegger warns that "Enframing blocks the shining forth and holding sway of truth" (QCT, p.28). Despite the fact that Enframing is itself a way of revealing, Heidegger believes that it obstructs other modes of unconcealment. The essence of modern technology, Enframing, restricts the mode of revealing to a single specific way, and this is what Heidegger considers to be the danger of modern technology.

Heidegger explains that this blocking of truth happens because
Enframing

...starts man upon the way of that revealing through which the real everywhere, more or less distinctly, becomes standing-reserve. "To start upon a way" means "to send" in our ordinary language. We shall

call that sending-that-gathers which first starts man upon a way of revealing, *destining*. (QCT, p.24.)

With Enframing, we are sent into a certain kind of revealing, to a certain kind of context of understanding. Enframing sends us to understand everything around us as standing-reserve. Heidegger calls this sending 'destining.' This destining leads to the danger of modern technology. It does not do this by simply forcing us to act in certain ways, to do specific things which link us with technology. The destining of revealing places us in a situation where everything must be revealed as standing-reserve. When discussing the destining of Enframing, Heidegger explains that

[a]s a destining, it banishes man into that kind of revealing which is an ordering. Where this ordering holds sway, it drives out every other possibility of revealing. Above all, Enframing conceals that revealing which, in the sense of *poiesis*, lets what presences come forth into appearance.... Where Enframing holds sway, regulating and securing of the standing-reserve mark all revealing. They no longer even let their own fundamental characteristic appear, namely, this revealing as such. (QCT, p.27.)

Enframing prevents us from experiencing any kind of revealing other than Enframing, and in doing so prevents us from knowing that the fundamental characteristic of technology is revealing. Enframing drives away the possibility of any other kind of revealing taking place, and at the same time it prevents us from noticing that revealing is taking place.

In "On the Essence of Truth", Heidegger discusses the mystery, the fact that revealing is concealed from us and that this concealment is concealed as well². This differs from the danger of modern technology in that while the concealment of concealing is prevalent in all modes of disclosure, the other modes of disclosure do not obstruct all others. Because of this, in other modes of disclosure it may be more evident that a multiplicity of contexts of understanding is possible. Even though the double concealment of

revealing is present in all contexts of understanding, the blocking of different contexts only happens in Enframing, and this makes it all the more difficult for us to notice that concealment and revealing are taking place.

This blockage of other ways of revealing, and of our awareness of the revealing itself, is what Heidegger considers to be dangerous about modern technology. Heidegger says "Enframing blocks the shining-forth and holding-sway of truth. The destining that sends into ordering is consequently the extreme danger" (QCT, p.28). Because Enframing destines us to understand everything around us as resources to be ordered, calculated and consumed, it is the danger of modern technology.

The destining of modern technology is a danger because it forces people to consider everything as standing-reserve, and in doing so it prevents us from noticing that truth is revealing. The hegemony of modern technological revealing prevents people from being aware of revealing, something Heidegger places great importance upon. He believes that the highest dignity of human essence "...lies in keeping watch over the unconcealment" (QCT, p.32). Human beings are the locus and medium of truth, and the highest dignity of humanity is in being aware of and keeping watch over revealing/truth. Enframing prevents this, however. As long as Enframing is the sole mode of unconcealment, humanity can never enter the highest dignity of its essence. The hegemony of modern technological revealing keeps us from knowing about the context of understanding within which we come to understand the things around us.

But Heidegger also believes that there is more to modern technology than only danger. Heidegger has already shown how we can think of Enframing in the sense of destining and danger, and now he is trying to tell us how we may be able to find a 'saving power' in Enframing as well.

In his hymn *Patmos*, Holderlin says "But where danger is, grows the saving power also" (QCT, p.28). If Enframing is the danger, if the essence of modern technology is where the danger is, it seems odd to expect the saving power to grow there as well. Heidegger says exactly this, however. He claims that, as Holderlin says, the saving power does reside along with danger, that we can find the saving power within Enframing. Heidegger believes that "Enframing cannot exhaust itself solely in blocking all lighting up of every revealing, all appearing of truth" (QCT, p.28). Enframing does not only hold us from the appearing of truth, it also harbours the growth of the saving power. It would be wrong to interpret this as meaning that the saving power and the danger are of inverse proportions. What Heidegger is saying is that the danger contains the possibility of a saving power. Without the danger, there could be no saving power.

In order to understand the saving power, Heidegger first discusses what is meant by the term 'to save'. He says we usually use 'save' to mean preventing the destruction of something, to "seize hold of a thing threatened by ruin" (QCT p.28). Heidegger says that we also can use the verb 'save' in another way. 'To save' can also mean to bring something into its essence. He explains "[t]o save is to fetch something home into its essence for the first time into its genuine appearing" (QCT, p.28). 'To save' can mean bringing essence into appearance, allowing us to see the essence. Heidegger is claiming that 'to save' can be used to mean something like 'to preserve', that the saving power of technology may bring the essence of modern technology before us and allow us to see it. Playing on this double meaning of 'save', Heidegger is saying that the saving power may bring the essence of modern technology into appearance before us, that it may show us that modern

technology is made possible by the context of understanding where revealing/truth happens, Enframing.

Heidegger then decides to examine Enframing one more time, and see if it can bring the saving power into appearance. He thinks that if the saving power grows in Enframing, it must be concealed there. We cannot expect to be able to find and understand the saving power immediately, we must carefully examine Enframing, looking clearly into the danger. In order to find the saving power, we must again explore the essence of modern technology in which the saving power grows.

In searching for the saving power, Heidegger begins by repeating the discussion he had earlier in the essay, asking what sense of the word 'essence' is meant when we say that Enframing is the essence of modern technology. For academic philosophers, essence means 'what something is'. Heidegger gives the example of 'treeness', a genus which covers all trees, a universal definition of what trees are.

Enframing, however, cannot be considered to be the essence of modern technology in this way. Enframing is not a genus, it is not a universal definition which holds for all things technological. We cannot take a technological apparatus and call it a particular example of Enframing; a steam turbine or a radio transmitter cannot be considered an Enframing. These things are revealed to us as stockparts or as available resources, but they are not particulars under a genus of Enframing. Heidegger explains this by saying

Enframing is never the essence of technology in the sense of a genus. Enframing is a way of revealing having the character of destining, namely, the way that *challenges* forth. (QCT, p.29.)

The relationship between Enframing and individual pieces of modern technological equipment cannot be characterized as a genus-species

relationship. Coal and uranium are not species of the genus Enframing in the way that Coke and Pepsi are species of the genus soft drink. Instead we consider the coal and uranium to be resources to be calculated and ordered because they are understood by us within a certain context of understanding, Enframing.

Enframing is the essence of modern technology, but not as a genus or *essentia*. Heidegger says modern technology demands us to consider 'essence' in another way. Because the essence of technology does not fit into the academic usage of the word 'essence', we must use 'essence' differently. We cannot mean generic type, or genus. Heidegger suggests that we should use the term essence to describe what things do, the way they hold sway and administer themselves, "the way in which they 'essence'" (QCT, p.30)³. The word 'essence' describes how something comes to presence in this new meaning, the way the things revealed to us exist. This is the third sense of essence used by Heidegger in this essay. He begins by considering essence as whatness, then he discusses essence as conditions for the possibility of modern technology, and finally he arrives at essence as enduring presence.

Heidegger claims that the Ideas of Plato are essences in this way, for he says Plato considers essence to be how something essences, the way things permanently exist. Heidegger believes Plato meant a permanent enduring in the Ideal plane. Heidegger denies that what endures is a "mythological abstraction" (QCT, p.31), as he characterizes Plato's Ideas, but like Plato, Heidegger does think that all essencing endures. Heidegger believes that modern technology does not endure as a permanent, unchanging Platonic Idea, instead he claims that we can see how technology essences only through the permanent enduring. He says "[t]he way in which technology essences lets itself be seen only from out of that permanent

enduring in which Enframing comes to pass as destining of revealing" (QCT, p.31). What Heidegger is saying is that we can see how modern technology essences, or the essence of modern technology, in what permanently endures, in the way in which the everyday items around us are revealed. The everyday items of our everyday lives endure before us. That is, they exist in a certain way made possible by the mode of unconcealment which they were revealed within. Considering the way things endure can give us an insight into the mode of revealing which made that enduring possible.

Heidegger, using an allusion to Goethe, says that 'to grant permanently' can be used for 'to endure permanently'. Heidegger then says: "*Only what is granted endures. That which endures primarily out of the earliest beginning is what grants*" (QCT, p.31). Enframing, as the essencing of modern technology, is what endures. Enframing can be considered a granting in that as a destining it reveals to people what they can neither invent nor make. As the context of understanding which makes modern technology possible, Enframing grants us what is unconcealed. Enframing gives us the everyday things we interact with daily which are revealed as standing-reserve.

Earlier in his essay Heidegger talks about how people cannot control how things are revealed to themselves. We cannot choose the mode of revealing, we do not control unconcealment. Within the realm of modern technology, it is in Enframing that unconcealment takes place, it is in Enframing that man is granted the unconcealed. Heidegger says that granting is what gives people access to the truth, it "conveys to man that share in revealing which the coming-to-pass of revealing needs" (QCT, p.32). Within Enframing, we are given a share in revealing, we take part in revealing. In this way, humanity is given to belong to the coming-to-pass of truth. This is the saving power. Because granting is how humanity can access the truth, it is

through granting that humanity can be saved. Since Enframing grants us the truth, it is through Enframing that we may be granted the truth about modern technology, that it is a way of revealing and that other contexts of understanding are possible. Enframing grants us the unconcealed, it makes it possible for us to understand things around us within a context of understanding. Because Enframing is such a granting, it may be possible for us to come to realize that Enframing is just one of many possible contexts of understanding.

Heidegger considers the danger of modern technology to be that it restricts the modes of revealing so that we are only revealed to in one way -- Enframing. This is not, however, all that Enframing does. While Enframing restricts revealing, it also grants us the unconcealed. The granting, or the saving power, restrains the destining of Enframing. In doing this the saving power also preserves Dasein, it allows people to keep watch over unconcealment, it allows people to understand the world around them. Although we do not choose the mode of revealing, we do watch over unconcealment. This means that we are capable of being aware that truth is a revealing within a context of understanding, and that there is a possibility of revealing taking place within contexts other than Enframing. It is the saving power which allows people to watch over unconcealment, rather than being a part of the standing reserve under unconcealment. Heidegger says

...the saving power lets man see and enter into the highest dignity of his essence. This dignity lies in keeping watch over unconcealment - and with it, from the first, the concealment - of all coming to presence on this earth" (QCT, p.32).

The saving power allows us to keep watch over the unconcealment and the concealment of modern technology. In doing so it allows us to realize that everything is revealed as standing-reserve and that this revealing is

concealed from us. Just as the danger of modern technology is not an ontic threat, Heidegger does not offer an ontic solution. The danger of modern technology is ontological, it is that Enframing will keep people from watching over concealment, from knowing about truth as revealing and about the character of the revealing that takes place. The saving power is also ontological, it allows people to understand the context within which everything is revealed to us and within which everything exists.

If we question concerning technology, paying attention to the coming to presence of modern technology, we will be able to see this saving power, this granting, within the Enframing which "threatens to sweep man away into ordering as the supposed single way of revealing" (QCT, p.32). If we see the saving power and foster it, we may be able to escape the restriction of Enframing and enter into the highest dignity of our essence. Fostering the saving power allows people to watch over unconcealment, to know about the mode of revealing which makes modern technology possible, and to thus be what Dasein essentially is -- the locus and medium of truth. In doing this the saving power can allow people to understand the world in ways other than as standing-reserve, it can save us from being bound to a specific way of revealing as ordering, from being subject to a narrow and dangerous way of thinking.

Seeing the granting which is the saving power does not actually save us, but it allows us to hope and foster the saving power as it increases. We cannot bring about the saving power in its full light by reflecting on it, we cannot bring about a change in the mode of revealing ourselves. But knowing that such a change is possible makes such a change possible, it prevents us from being cut off entirely from other modes of revealing. The saving power is the possibility of change, it is not the actual change in modes of revealing.

Heidegger suggests that our actions can help to foster a growth in the saving power, as long as we keep our eyes on the danger at the same time.

In the closing pages of his essay, Heidegger suggests that we may be able to introduce the saving power in another way, through art. He asks "...might there not perhaps be a more primally granted revealing that could bring the saving power into its first shining forth in the midst of the danger...?" (QCT, p.34), and answers that art may be this other way of revealing which can bring the saving power.

Heidegger explains that art is also *τέχνη*, according to the ancient Greeks, and perhaps today we can use art to shed light on the truth. Heidegger claims that the Greeks did not consider art to be an aesthetic enterprise, nor a segment of cultural activity. They believed art was a way of bringing truth, a mode of revealing. He explains that

...[i]n Greece, at the outset of the destining of the West, the arts soared to the supreme height of the revealing granted them.... And art was simply called *techne*. It was a single manifold revealing. (QCT, p.34.)

In the Greek world, the work of both the artist and the artisan were called *τέχνη*, and they were both revealing. Art and modern technology have this in common. They are both modes of revealing, and perhaps because of this the saving power can be brought shining forth with the help of art. With the help of art, Heidegger thinks we can be saved from modern technology⁴.

Heidegger says that both art and technology are involved in revealing. In explaining this relationship he says the following:

What, then, was art -- perhaps only for that brief but magnificent time? Why did art bear the modest name *techne*? Because it was a revealing that brought forth and hither, and therefore belonged within *poiesis*. It was finally that revealing which holds sway in all the fine arts, in poetry, and in everything poetical that obtained *poiesis* as its proper name. (QCT, p.34.)

Heidegger is saying that art, like technology, is a revealing involved in making things, in ποιήσις⁵. As such, it is a τέχνη. The activities classified as τέχνη, traditionally have been ones where people work to build things, where people carefully consider a τέλος, and in light of that gather together the εἶδος and ὕλη needed to reveal what was to be made. As Heidegger said earlier in the essay, "[t]echne... reveals whatever does not bring itself forth and does not yet lie here before us" (QCT, p.13); τέχνη reveals things which cannot reveal themselves, it is the way people can reveal things through their acts of making and doing, through ποιήσις. The fine arts are a τέχνη, they are human acts of making and doing which reveal things that do not reveal themselves. As such they are like technology, which can be described with the anthropological instrumental definition of a human activity and a means to an end. Both modern technology and the fine arts have arisen out of what was once unified by the Greek word τέχνη, and because of this Heidegger thinks the fine arts may be able to save us from Enframing, the way of revealing holding sway in modern technology.

Heidegger could be criticized since in appealing to art as a saving power he is illicitly invoking catagories of art which are currently being called into question by art historians and aestheticians. It could be argued that without a functional definition of what art is, appeal to art as a saving power is problematic. In reply to this, I think Heidegger could claim that he has defined art well enough to suit his purposes. In appealing to the art of the Greeks, Heidegger distances himself from the contemporary problems of defining art. While Heidegger's defining of art as τέχνη may be problematic to the aesthetician, and may not accurately characterize modern art, it does give Heidegger a historically grounded notion of art as revealing as opposed to simply human production.

From the discussion so far, it is not evident how art will save us from the hegemony of modern technological revealing. Since art and technology are closely related, and both are ways of revealing, then it seems that art too may reveal everything to us as standing-reserve. But if art is to save us, it cannot also be a way of revealing that sweeps away all other ways of revealing.

In order to foster the saving power, art must reveal in a different way, in a way that does not reveal everything as standing-reserve and which does not conceal all other revealings. Heidegger does not discuss the artistic revealing in comparison to technological revealing at great length, so the difference between the two cannot be immediately seen.

One difference that is evident from Heidegger's text is that while modern technology reveals things as standing-reserve, as resources that have been ordered and calculated and await human consumption, τέχνη reveals "whatever does not bring itself forth" (QCT, p.13). Enframing does not bring itself forth, in fact it does precisely the opposite -- it conceals itself. The mode of revealing prevailing in modern technology does not bring itself forth, so perhaps τέχνη, a mode of revealing which unconceals things which do not bring themselves forth, could unconceal Enframing. Of course this does not mean that the τέχνη of the Greeks will save us from modern technology. As Nwodo explains, Heidegger believes that "the world revealed in the work of art is the world of a particular people at a particular epoch" (Nwodo, p.61). The revealing of Greek art could only tell us about the Greek world, it would not unconceal modern technology, it would not reveal Enframing. Instead, perhaps we should consider the art of the current epoch in trying to find the saving power.

In order to understand how art could possibly reveal Enframing for us, Heidegger's essay "The Origin of the Work of Art" should be discussed. There Heidegger explains that the artwork reveals to us, that art brings truth out into the open and allows us to experience it.

In his essay on art, Heidegger says that the work of art sets up a world. The art work "opens up a *world* and keeps it abidingly in force" (OWA, p.44). In saying this, Heidegger is claiming that the art work sets up and preserves an open region where revealing can take place. He describes the world set up by the art work by saying "[t]he world is the self-disclosing openness of the broad paths of the simple and essential decisions in the destiny of an historical people" (OWA, p.48). The world is an openness which discloses itself; it does not conceal, but rather reveals itself. The world also is tied to a specific historical people, the ancient Greeks and the people of the modern epoch do not share the same contexts of understanding, and thus their works of art would set up different worlds.

Heidegger contrasts the world with the earth, which he says "is not to be associated with the idea of a mass of matter deposited somewhere, or with the merely astronomical idea of a planet" (OWA, p.42). The earth Heidegger discusses is not the earth of the astronomer or physicist, instead it is to be understood as the material the art work is constructed from, as the ground on which the art work rests. Nwodo describes the earth by saying an art

...work in stone, clay or canvas instead of swallowing up any of these materials reveals it, bringing it out into the open, allowing it to emerge as it is in itself. Heidegger calls this the earth, the primordial matter that emerges. (Nwodo, p.67.)

The earth is the primordial matter which composes the art work, and is revealed by it. The earth is not self-revealing, however. Instead, the earth conceals itself. Heidegger says "[t]he earth is the spontaneous forthcoming of

that which is continually self-secluding and to that extent sheltering and concealing" (OWA, p.48). The earth is all of the things around us which make up our surroundings but which conceal themselves when we try to understand them. Describing this, Heidegger gives examples of stone and colour, which we can try to scientifically quantify, but when we do quantify the weight of the stone or the wavelength of the colour, the stone and the colour escape us, they are replaced with numbers (OWA, p.47). Whenever we try to examine the rock or the colour, we end up losing what makes the stone a stone, or the colour a colour. The number we assign to the weight or the colour has no weight or colour, such characteristics are concealed when we study the earth.

The work of art sets up a world, an openness, a context of revealing. This world sets forth an earth, it puts the earth before us in such a way that it is revealed to us. Heidegger explains that

...the temple-work, in setting up a world, does not cause the material to disappear, but rather causes it to come forth for the very first time and to come into the Open of the work's world. The rock comes to bear and rest and so first becomes rock; metals come to glitter and shimmer, colors to glow, tones to sing, the word to speak. All this comes forth as the work sets itself back into the massiveness and heaviness of stone, into the firmness and pliancy of wood, into the hardness and luster of metal, into the lighting and darkening of color, into the clang of tone, and into the naming power of the word. (OWA, p.46.)

The work of art reveals the earth to us. It sets up the world, providing an opening for the unconcealment of the earth. The world is also dependant on the earth. The work sets itself back into the earth, into the materials which surround us. Neither the world nor the earth could exist without the other. The world is composed of the relationships between the different parts of the earth, and the earth is set forth by the world⁶.

The work of art shows us a world, and this world reveals the earth, which is self-concealing, to us. If this is the case, then perhaps art could

reveal Enframing, which is self-concealing. But Enframing is more like a world than an earth, so this may not be possible. Enframing is the mode of revealing, it is the open space, rather than a thing which can be revealed within the opening. The modern technological mode of revealing is not a material like stone or wood, nor is it a collection of experiences like those of the peasant woman which can be revealed through an art work. Instead it is a context of understanding, and thus could not be considered earth. As such, it seems unlikely that the world could reveal Enframing.

It also seems unlikely that the art work could reveal Enframing as its own world. Heidegger says that the world is a self-disclosing openness, and this makes it impossible for the world of an art work to be characterized as Enframing. Enframing is the way of revealing which conceals itself -- it could not be a self-disclosing openness. Enframing also could not be revealed within another world set up by the art work. Since Enframing sweeps away other kinds of revealing, it would also sweep away the open of the world. The saving power must arise from within Enframing, and thus could not be another way of revealing.

Singh suggests that what is revealed by an art work is not any particular world, but instead the fact that a world exists. He claims that in Heidegger's essay

...[t]he distinctive role of an artwork lies in revealing the worldhood of the world and the earthiness of the earth, and not merely a specific world and a specific earth. (Singh, p.216.)

This would allow art to foster the saving power, to reveal that revealing takes place and that other types of revealing are possible. The problem with this reading of Heidegger is that it does not take into account the self-concealment of the revealing of modern technology. In Singh's reading of Heidegger, the art

work would have to reveal that it is revealing, and do this while being disclosed within Enframing. As something revealed by Enframing, however, the art work could not reveal the revealing, because that is precisely what the Enframing is concealing. If the world set up by the work of art is the world of Enframing, then the worldhood could not be revealed by the work.

On the other hand, if the art work is not constrained by the hegemony of modern technology and is able to reveal Enframing to us, then we would not need to foster the saving power because it would be evident all around us in all works of art. Every work of art would disclose to us that revealing takes place and that other contexts of understanding are possible. This does not seem to be the case, however. Instead works of art are bought, sold, and viewed like any other commodities in the marketplace. Art is treated as something to be calculated, ordered and stored in a museum or gallery, and the viewers of art works are gathered and ordered to these galleries and museums by the tourist industry.

Another possibility for art fostering the saving power is that the artist may have a profound insight into Being and so can create works of art which reveal to us the concealment of Enframing. This way of having art save us from modern technology is not consistent with what Heidegger says about revealing in general, and with what he says about the artist in particular.

Throughout his work, Heidegger points out that people do not control the mode of disclosure, that people cannot willfully change the way things are revealed⁷. In "The Question Concerning Technology", Heidegger says "man does not have any control over unconcealment itself" (*QCT*, p.18), and this notion is also expressed in "On the Essence of Truth." Revealing is something that we take part in, not something which we can choose or invent. Nobody can decide to reveal things differently, to work within a different context of

understanding. Heidegger does not believe that anybody has any control over the mode of disclosure, and he also makes special mention of the artist in this regard.

In the *Principle of Reason*, Heidegger compares Mozart to a lute played by God (Heidegger, *Principle of Reason*, hereafter *PR*, pp.67-68). As such, the artist is a channel through which Being passes, rather than a controller of revealing. If the artist is an instrument of revealing, a 'lute piece of God', the artist would be unaware of the way the work of art reveals things to us.

While it may be possible that the artist has a profound insight into the world as revealed in the art work, the artist does not have an insight into the mode of revealing which made the production of that art possible and through which the art presences. With this situation, the artist does not produce art because of a profound insight into unconcealment, but instead is merely a channel for that unconcealment. It is possible that the artist may also be able to understand the mode of revealing at play in the art work, but this does not mean that the artist is communicating that insight to others with the art work. If the artist does have a profound insight into the art work, then only the artist would come to understand the danger and only the artist would foster the saving power. Everybody but the artist, everybody without this profound insight, would continue to participate in the revealing of modern technology.

It also seems unlikely that the artist of today could have such an insight since the art is being produced within the context of modern technology. If Enframing, the mode of revealing which sweeps away all others while at the same time concealing itself, holds sway in the production of the art work, then it seems probable that Enframing would be concealed from the artist as well.

Heidegger's claim that the artist is only a channel through which Being is expressed leads to a difficulty in distinguishing between the creation of works of art and the creation of other human-made objects. If the artist is only an instrument of revealing, a channel for disclosure the of beings, then it seems that the artist may be no different than any other person manufacturing things within Enframing. The artist, like the miner, the assembly line worker and the data entry clerk, is working within the context where everything is revealed as standing-reserve. People in all of these occupations reveal within Enframing without any knowledge of the context of understanding their work is being created within. The art work may be standing-reserve just like the coal, the automobile, and the columns of numbers, waiting to be used after being challenged forth and ordered.

If we remove the artist from the situation, we can see another possibility of art fostering the saving power. Heidegger suggests that the artist does not have to be taken into account when art is considered in "The Origin of the Work of Art", where he says "...the artist remains inconsequential as compared with the work, almost like a passageway that destroys itself in the creative process for the work to emerge" (OWA, p.40). Compared to the work of art, the artist is inconsequential. Heidegger is saying that we should not consider the artist when examining art, but should concentrate on the work itself. We should look at the art work, not the artist, for insight into revealing. It may be possible that items observed by people may reveal in a non-technological fashion. This scenario removes the artist, and leaves only the viewer and the work.

It seems unlikely, however, that such a third party observance could lead to a fostering of the saving power for two reasons. First, if the work is recognized as art because a third party sees it as revealing in a non-

technological fashion, making the creation of the work irrelevant, it would seem to make art very different from technology. It would remove the human aspect from the creation of art, which was its bond with technology. Heidegger believes that art may save us from modern technology precisely because it is similar to technology, because it is a human activity within the mode of unconcealment of modern technology, and as such it reveals to us. Removing human production from art takes away the link between technology and art provided by their common origin in τέχνη. When Heidegger says the artist is inconsequential, he is not saying that we should ignore the fact that the work was created by a human, he is saying that we should ignore the intentions and goals of the artist when interpreting the work.

Secondly, if the origin of the art work is not taken into account, then there is no reason why we should not expect things not made by humans to reveal the essence of modern technology to us. If the origin of things is ignored, naturally occurring things such as rivers and mountains as well as human made artifacts may all be expected to help us foster the saving power. This is clearly not the case since, as Heidegger points out, today revealing is dominated by the essence of modern technology. He points out that natural objects are revealed as standing-reserve when he discusses the Rhine. He says

...[w]hat the river is now, namely a water power supplier, derives its essence from out of the power station.... But... the Rhine is still a river in the landscape, is it not? Perhaps. But how? In no other way than as an object on call for inspection by a tour group ordered there by the vacation industry. (QCT, p.16.)

The Rhine, and all other natural phenomena, are revealed to us only as standing-reserve and thus could not be expected to reveal the essence of modern technology. If we disregard the human origin of art works, they too

could only be understood as we understand nature: resources to be ordered, calculated and consumed.

Throughout this questioning of technology and its relationship to art, the stumbling block which has prevented us from being able to foster a saving power has been the Enframing that art is supposed to save us from. The possible ways of saving us from modern technology have all been stopped by the hegemony of modern technological revealing. Does this mean that "only a god can save us" (Heidegger, "Only a God Can Save Us", p.107), as Heidegger says in his *Der Spiegel* interview? Has the technological domination of art so corrupted art that it can only reveal to us as standing-reserve?

Foti says "Heidegger, of course, is aware that the saving power of the artwork is itself threatened by incursions of technicity" (Foti, p.310), Heidegger knows that art is being swept away within the modern technological mode of revealing, yet he suggests art as a saving power. Heidegger recognizes the grip of Enframing on modern art, he says "[w]hat one names with the ill-suited title 'abstract art' thus has its legitimate function in the domain of this technico-scientific world-construct" (*PR*, p.20). Abstract art's function is within the context of understanding prevalent in modern technology, it is revealed to us as Enframing. If this is the case, then perhaps we were wrong to look at contemporary art works when trying to find the saving power. Contemporary art is dominated by Enframing. Perhaps Heidegger believes we should not be looking at modern art, but instead at other types of art works for the saving power.

In "The Origin of the Work of Art", the works of art discussed by Heidegger include Greek temples and paintings of peasant shoes. He is not putting forth works of art which reveal modern technology, rather he considers

works which reveal other ways of life. Van Gogh's *Peasant Shoes* do not reveal Enframing, Heidegger believes they reveal the world of a peasant woman working the soil. The Greek temple does not reveal the challenging forth of modern technology, but instead the religious world of an ancient culture. If we consider this in light of Singh's reading of Heidegger's essay on art, that "...the distinctive role of an artwork lies in revealing the worldhood of the world... and not merely a specific world" (Singh, p.216), maybe we can understand how art can foster the saving power.

The works of art discussed by Heidegger do not reveal our world, the world of modern technology. Instead they reveal the worlds of long gone ways of life, such as the worlds of the peasant and the Greek cult member. If art is to reveal to us the fact that revealing is taking place, it does not need to disclose Enframing. The Greek temple does not reveal Enframing, but it does reveal itself in a manner which does not easily lend itself to Enframing. When the temple reveals itself as the site of cultic life for the Greek people, we realize that there are other contexts of understanding besides Enframing. Disclosing another context of understanding to us will make people realize that there are other contexts of understanding.

Of course, the holding sway of Enframing prevents us from being revealed to within any other context of understanding. As Heidegger says, "the world is the self-disclosing openness of the broad paths of the simple and essential decisions in the destiny of an historical people" (OWA, p.48). The world of an art work is tied to the destiny of an historical people, only the Greek cult members can be revealed to within the world of the Greek temple. We cannot be revealed to in that world, we can only be revealed to within Enframing.

This does not mean that the temple and the peasant shoes cannot be revealed to us, that they cannot show us that there are worlds other than the one of Enframing. The temple and the painting can be revealed to us within Enframing, yet we can still realize that they were created within a different context of understanding, that they did not always have a place within Enframing. We can recognize that the temple was not always a destination of travel for the tourist industry, that it was once the centre of a profound religious experience for a people. While we cannot share in that experience, we can recognize that we cannot share in it, thereby discovering that there are other modes of revealing besides the one dominant in the modern technological epoch. Such a discovery could jar us out of our complacent acceptance of Enframing as the sole mode of unconcealment, and help us foster the saving power.

This type of experience with art may seem to be somewhat peculiar. Today we usually experience works of art as standing-reserve for the tourism industry, or as items to be bought and sold in a speculative marketplace. This is not what Heidegger means when he speaks of art, however. Heidegger thinks that art opens up possibilities of Being. Art is not simply one more human activity among many others, it is a way of Being which produces the artifacts we call works of art. These works are created in a context of understanding other than Enframing, and as such may be able to reveal to us in a way other than Enframing.

It is in this way, in revealing to us in a way that we cannot easily place within our context of understanding, that art may foster a saving power. If art can show us that at one time there was a different mode of unconcealment, that it is possible for truth to be revealing in a fashion other than Enframing, then art may indeed save us from modern technology. This will not happen,

however, if Enframing is able to so overtake us that we are incapable of understanding the Greek temple as anything other than a tourist destination, and the peasant shoes as anything other than an investment opportunity. If the hegemony of modern technological revealing has reached such proportions, then perhaps even a god would not be able to save us. Heidegger denies that the danger of the essence of modern technology could so overtake us, however. He thinks that while the hegemony of Enframing may dim the saving power, "The world's darkening never reaches to the light of Being" (Heidegger, "The Thinker as Poet", p.4), the danger can never completely obscure the possibility of our escape from Enframing.

In chapter one Heidegger' claim that the essence of technology can be thought of as a way of revealing/truth through his study of the anthropological instrumental definition of technology was discussed. In chapter two, Heidegger's notion of Enframing, the way things are revealed as standing-reserve in the modern technological epoch, was considered, and that was followed in this chapter by a discussion of Heidegger's belief that the danger of modern technology is in Enframing. Heidegger believes that Enframing prevents people from recognizing that revealing takes place, thus preventing people from reaching the highest dignity of their essence as the medium and locus of truth.

Enframing also is the source of the saving power, however, and Heidegger claims that it is through art that this saving power can be fostered. He claims that art may be able to help us watch over unconcealment, it may enable us to see that the ontic realm is revealed to us, that it is made possible by a context of understanding things are revealed within. While it seems unlikely that art would be able to reveal Enframing directly, it may be possible

for art to reveal to us that other modes of unconcealment are possible. Art works such as a Greek temple or a painting of peasant shoes may let us know that other ways of life are possible, that we do not have to live within a modern technological context of understanding. This knowledge will make it possible for us to escape the hegemony of our current mode of unconcealment, it will save us from modern technology.

An example may be of help in clarifying the issue of the danger of modern technology and the saving power of art. If we consider a situation where it is proposed that a section of the Sahara desert should be irrigated or manipulated meteorologically in order to turn it into suitable farmland so that we can save countless human lives from starvation, we can see how Heidegger would respond to an ontic problem, and how ontic problems of modern technology are related to the ontological issues discussed by Heidegger.

In order to make a decision on whether to approve or disprove of this project, there seem to be four possible courses of action for Heidegger. Firstly, he could engage in even more calculation to determine the ontic effects not only on the desert, but on the rest of the world as well, before approving or disapproving the project. He could perform environmental impact assessments and cost benefit analyses in order to determine whether the irrigation project would be harmful or beneficial to humanity. Secondly, he could do nothing out of fear that the type of calculations available for his use are not adequate to assess the ontic dangers of reclaiming the desert. Thirdly, he could with a shrug of his shoulders say that only a god could save us from the ontological danger of modern technology. Finally, he could try to adopt a new way of revealing which would allow an ontological solution to the problem

of starvation, such as a radical rethinking of our way of living, rather than an ontic one such as increasing food production.

To the first possibility, Heidegger could reply that when facing ontic problems of modern technology, we must answer them with the same kind of calculative thinking which led to the problem in the first place. In order to decide on the ontic safety or the ontic danger of any modern technological project, a calculating of the dangers is necessary before taking any action. The only way to determine the ontic effectiveness of a modern technological course of action is to undertake even more calculations and participate in even more ordering.

To the second possibility, Heidegger would say that we would be wrong to do nothing, that we should not hide from the ontic problems around us. As explained above, ontic problems require ontic solutions. To retreat into inaction would not save us from the ontological danger of modern technology. As Heidegger says, "[e]verywhere we remain unfree and chained to technology, whether we passionately affirm or deny it" (QCT, p.4). Avoiding ontic problems by hiding from them does not save us from the ontological danger, it only makes the ontic problems worse while leaving the ontological danger intact.

The third possibility, that only a god can save us, would be agreed to by Heidegger, and in fact is what Heidegger says in the *Der Spiegel* interview. Heidegger believes that we cannot calculate a solution to the ontological question of modern technology. The mode of revealing prevalent today cannot be overturned by an act of calculation or of ordering. Instead we must wait for a new epoch characterized by a different mode of revealing to unfold. This does not, however, preclude ontic action in the face of ontic dangers posed by modern technology. To say that we cannot will an ontological change does not

mean that we cannot or that we should not act ontically to try and solve ontic problems.

Heidegger would reject the fourth possibility. As explained in the discussion in the preceding paragraph, as well as in chapter 2, people have no control over the ruling truth relation. We cannot simply reject Enframing and adopt a new context of revealing. While he says that we do not control the revealing of truth, Heidegger also believes we may be able to foster the saving power through art, and thus promote the possibility of our being revealed to in a context other than Enframing.

We look into the danger and see the growth of the saving power. Through this we are not yet saved. But we are thereupon summoned to hope in the growing light of the saving power. How can this happen? Here and now and in little things, that we may foster the saving power in its increase. (*QCT*, p.33.)

Notes

- ¹Context of understanding' may be a somewhat misleading way of phrasing this, since Heidegger believes that the mode of revealing is characterized not only by the way we understand things, but by 'attunement, understanding, and discourse'.
- ²For more on the mystery, see chapter 2.
- ³This use of 'essence' as a verb is not something new to Heidegger. The word 'essence' is derived from the Latin verb *esse*, which has the Greek εἶμι as a source, and means 'to be' or 'to exist'. Heidegger also quotes Aristotle saying τὸ τί ἦν εἶναι (QCT, p.30), a construction which uses 'essence' as a verb.
- ⁴This claim that art will save us from modern technology is especially surprising when we consider that throughout the history of philosophy, art, and particularly poetry and painting, have been branded as things which lead us away from, rather than towards truth. Two of the more notable philosophers to have done this are Plato, whose critique of the fine arts in *The Republic* is well known, and Francis Bacon, who refers to poetry as "nothing else but feigned history" (Bacon, p.80), and was one of the philosophers who helped to usher in the modern technological age Heidegger is trying to save us from. For more on the relationship between art and truth in the ancient Greek world, see Brogan's "The Battle between Art and Truth: a Reconsideration."
- ⁵Here Heidegger has again used ποιήσις as 'bringing forth', just as he did in the passage discussed in chapter 1, but this time it is not problematic in the same way it was earlier. This is because he is not basing his argument on a reading ποιήσις as *hervorbringen*.
- ⁶The difference between earth and world seems to parallel the difference between ontic and ontological. Both the earth and the ontic are everyday things around us which are revealed to us. Similarly, both the world and the ontological are contexts of understanding which make the revealing of the earth/ontic possible.
- ⁷For more on this, see above chapter 2.

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